IPG PHOTONICS CORP
Form 10-K
March 13, 2008

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

Form 10-K

(Mark One)

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2007

OR

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

Commission File Number: 001-33155

IPG PHOTONICS CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**04-3444218**
(State or other jurisdiction of incorporation or organization)	*(IRS Employer Identification No.)*
50 Old Webster Road, Oxford, Massachusetts	**01540**
(Address of principal executive offices)	*(Zip Code)*

Registrant s telephone number, including area code:
(508) 373-1100

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

Title of Class	**Name of Exchange on Which Registered**
Common Stock, Par Value $0.0001 per share	**The NASDAQ Stock Market LLC**

Securities registered pursuant to Section 12(g) of the Act: None

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

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 þ

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was

required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes þ No 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. (Check one):

Large accelerated filer o	Accelerated filer þ	Non-accelerated filer o	Smaller reporting company o

(Do not check if a smaller reporting company)

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

As of June 29, 2007, the aggregate market value of the registrant s common stock held by non-affiliates of the registrant was approximately $325,903,020 million, calculated based upon the closing price of our common stock of $19.95 per share as reported by the Nasdaq Global Market on June 29, 2007.

As of February 29, 2008, 44,093,455 shares of the registrant s common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant s Proxy Statement for its 2008 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A within 120 days of the end of the registrant s fiscal year ended December 31, 2007 are incorporated by reference into Part III of this Annual Report on Form 10-K.

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This Annual Report on Form 10-K contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and we intend that such forward-looking statements be subject to the safe harbors created thereby. For this purpose, any statements contained in this Annual Report on Form 10-K except for historical information are forward-looking statements. Without limiting the generality of the foregoing, words such as may, will, expect, believe, anticipate, intend, could, continue or the negative or other variations thereof or comparable terminology are intended to identify forward-looking statements. In addition, any statements that refer to projections of our future financial performance, trends in our businesses, or other characterizations of future events or circumstances are forward-looking statements.

The forward-looking statements included herein are based on current expectations of our management based on available information and involve a number of risks and uncertainties, all of which are difficult or impossible to accurately predict and many of which are beyond our control. As such, our actual results may differ significantly from those expressed in any forward-looking statements. Factors that may cause or contribute to such differences include, but are not limited to, those discussed in more detail in Item 1 (Business) and Item 1A (Risk Factors) of Part I and Item 7 (Management s Discussion and Analysis of Financial Condition and Results of Operations) of Part II of this Annual Report on Form 10-K. Readers should carefully review these risks, as well as the additional risks described in other documents we file from time to time with the Securities and Exchange Commission (the SEC). In light of the significant risks and uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by us or any other person that such results will be achieved, and readers are cautioned not to rely on such forward-looking information. We undertake no obligation to revise the forward-looking statements contained herein to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

PART I

ITEM 1. *BUSINESS*

Our Company

IPG Photonics Corporation (IPG, the Company, the Registrant, we , us or our) was incorporated in Delaware i
The Company is the leading developer and manufacturer of a broad line of high-performance fiber lasers for diverse applications in numerous markets. Fiber lasers are a new generation of lasers that combine the advantages of semiconductor diodes, such as long life and high efficiency, with the high amplification and precise beam qualities of specialty optical fibers to deliver superior performance, reliability and usability.

Our diverse lines of low, mid and high-power lasers and amplifiers are used in materials processing, advanced, communications and medical applications. We sell our products globally to original equipment manufacturers, or OEMs, system integrators and end users. We market our products internationally primarily through our direct sales force and also through agreements with independent sales representatives and distributors. We have sales offices in the United States, Germany, Italy, the United Kingdom, Japan, China, South Korea, India and Russia.

We are vertically integrated such that we design and manufacture all key components used in our finished products, from semiconductor diodes to optical fiber preforms, finished fiber lasers and amplifiers. Our vertically integrated operations allow us to rapidly develop and integrate advanced products, protect our proprietary technology and ensure access to critical components while reducing manufacturing costs.

Industry Background

Traditional Laser Technologies

Since the laser was invented over 45 years ago, laser technology has revolutionized a broad range of applications and products in various industries, including automotive, medical, research, consumer products,

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electronics, semiconductors and communications. Lasers provide flexible, non-contact and high-speed ways to process and treat various materials. They are widely used to transmit large volumes of data in optical communications systems, in various medical applications and in test and measurement systems. For a wide variety of applications, lasers provide superior performance and a more cost-effective solution than non-laser technologies.

Lasers emit an intense light beam that can be focused on a small area, causing metals and other materials to melt, vaporize or change their character. These properties are utilized in applications requiring very high-power densities, such as marking, printing, welding, cutting and other materials processing procedures. Lasers are well-suited for imaging and inspection applications, and the ability to confine laser light to narrow wavelengths makes them particularly effective in medical and sensing applications. A laser works by converting electrical energy to optical energy. In a laser, an energy source excites or pumps a lasing medium, which converts the energy from the source into an emission consisting of particles of light, called photons, at a particular wavelength. Lasers are used as an energy or light source for various applications. They are also incorporated into manufacturing, medical and other systems by original equipment manufacturers (OEMs), system integrators and end users.

Historically, CO_2 gas lasers and crystal lasers have been the two principal laser types used in materials processing and many other applications. They are named for the materials used to create the lasing action. A CO_2 laser produces light by electrically stimulating a gas-filled tube. A crystal laser uses an arc lamp, pulsed flash lamp, or diode stack or array to optically pump a special crystal. The most common crystal lasers use YAG crystals infused with neodymium or ytterbium.

Introduction of Fiber Lasers

Fiber lasers use semiconductor diodes as the light source to pump specialty optical fibers, which are infused with rare earth ions. These fibers are called active fibers and are comparable in diameter to a human hair. The laser emission is created within optical fibers and delivered through a flexible cable. As a result of their different design and components, fiber lasers are more reliable, efficient, robust and portable, and easier to operate than traditional lasers. In addition, fiber lasers free the end users from fine mechanical adjustments and the high maintenance costs that are typical for conventional lasers.

Although low-power fiber lasers have existed for approximately four decades, their increased recent adoption has been driven primarily by our improvements in their performance, increases in output power levels and decreased costs. Over the last several years, technological improvements in optical components such as active fibers have increased their power capacities and resulted in overall performance improvements in fiber lasers. Fiber lasers offer output powers that exceed those of conventional lasers in many categories. Also, semiconductor diodes historically have represented the majority of the cost of fiber lasers. The high cost of diodes meant that fiber lasers could not compete with conventional lasers on price and limited their use to high value-added applications. Recently, however, semiconductor diodes have become more affordable and reliable due, in part, to substantial advancements in semiconductor diode technology and increased production volumes. As a result, the average cost per watt of output power has decreased dramatically over the last decade. Because of these improvements, fiber lasers can now effectively compete with conventional lasers over a wide range of output powers and applications. As a pioneer in the development and commercialization of fiber lasers, we have contributed to many advancements in fiber laser technology and products.

Advantages of Fiber Lasers over Traditional Lasers

We believe that fiber lasers provide a combination of benefits that include:

Superior Performance. Fiber lasers provide high beam quality over the entire power range. In most traditional laser solutions, the beam quality is sensitive to output power, while in fiber lasers, the output beam is virtually non-divergent over a wide power range, meaning the beam can be focused to achieve high levels of precision, increased power densities and greater distances over which processing can be completed. The superior beam quality and greater intensity of a fiber laser s beam allow tasks to be accomplished rapidly and with lower-power units than comparable conventional lasers.

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Lower Total Cost of Ownership. Fiber lasers offer strong value to customers because of their generally lower total operating costs due to their lower required maintenance costs, high reliability and energy efficiency. The initial purchase price for fiber lasers is generally below that of YAG lasers and comparable to that of conventional CO_2 lasers. Fiber lasers convert electrical energy to optical energy 2 to 3 times more efficiently than diode-pumped YAG lasers, 3 times more efficiently than conventional CO_2 lasers and 15 to 30 times more efficiently than lamp-pumped YAG lasers. Because fiber lasers are much more energy-efficient and place lower levels of thermal stress on their internal components, they have substantially lower cooling requirements compared to those of conventional lasers and lower or no maintenance costs.

Ease of Use. Many features of fiber lasers make them easy to operate, maintain and integrate into laser-based systems and thus allow fiber lasers to provide a turnkey solution.

Compact Size and Portability. Fiber lasers are typically smaller and lighter in weight than traditional lasers, saving valuable floor space. While conventional lasers are delicate due to the precise alignment of mirrors, fiber lasers are more durable and able to perform in variable environments.

Choice of Wavelengths and Precise Control of Beam. The design of fiber lasers generally provides a broad range of wavelength choices, allowing users to select the precise wavelength that best matches their application and materials.

Fiber amplifiers are similar in design to fiber lasers, use many of the same components, such as semiconductor diodes and specialty optical fibers, and provide many of the same advantages in the applications that require amplification.

Notwithstanding the benefits offered by fiber lasers, there remain applications and processes where traditional laser technologies may provide superior performance with respect to particular features. For example, crystal lasers can provide higher peak power pulses and fiber lasers do not generate the deep ultraviolet light that is used for photolithography in many semiconductor applications. In addition, CO_2 lasers operate at wavelengths that are optimal for use on many non-metallic materials, including plastics, and may be preferred for certain types of metal cutting because of their wavelength capabilities and other features.

Our Competitive Strengths

We believe that our key strengths and competitive advantages include the following:

Differentiated Proprietary Technology Platform. At the core of our products is our proprietary pumping technology platform that allows our products to have higher output powers and superior beam quality than are achievable through traditional techniques. Our technology platform is modular, scalable, robust and electrically efficient.

Leading Market Position. As a pioneer and technology leader in fiber lasers, we have built leading positions in our various end markets with a large and diverse customer base. Based on our leadership position, we are driving the proliferation of fiber lasers in existing and new applications.

Breadth and Depth of Expertise. Since the founding of our company in 1990, our core business has been developing, designing, manufacturing and marketing advanced fiber lasers and amplifiers. We have extensive know-how in materials sciences, which enables us to make our specialty optical fibers, semiconductor diodes and other critical components.

Vertically Integrated Development and Manufacturing. We develop and manufacture all of our key specialty components, such as semiconductor diodes, active fibers, passive fibers and specialty optical components. Our proprietary components are capable of handling the stress of the high optical powers from our products and we believe they exceed the performance of commercially available components. We believe that our vertical integration enhances our ability to meet customer requirements, accelerate development, manage costs and improve component yields, all while maintaining high performance and quality standards.

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Diverse Customer Base, End Markets and Applications. Our diverse customer base, end markets and applications provide us with many growth opportunities. Our products are used in a variety of applications and end markets worldwide. Our principal end markets and representative applications within those markets include:

Materials Processing

General manufacturing	Marking, engraving and printing Welding and cutting Prototyping, cleaning and stripping
Automotive	High-strength steel cutting and welding Welding tailored metal blanks, frames and transmissions Cutting frames and sheets
Heavy industry	Hardening and welding pipes in nuclear and pipeline industries Welding and cutting thick plates for ships and rail cars Drilling concrete and rock
Aerospace	Welding titanium air frames Cladding parts Percussion drilling of parts
Consumer	Credit card marking Diamond marking and cutting Stent and pacemaker manufacturing
Semiconductor and electronics	Computer disk manufacturing and texturing Solar cell manufacturing Memory repair and trim
Advanced Applications	Obstacle warning and light detecting and ranging Materials destruction testing Research, sensing and instrumentation

Communications	Broadband fiber to premises Broadband cable video signal transport Metro and long-haul wire-line DWDM transport
Medical	Skin rejuvenation and wrinkle removal General surgery and urology Dental and ophthalmology

Broad Product Portfolio and Ability to Meet Customer Requirements. We offer a broad range of standard and custom fiber lasers and amplifiers that operate between 1 and 2 microns. Our vertically integrated manufacturing and broad technology expertise enable us to design, prototype and commence high-volume production of our products rapidly, allowing our customers to meet their time-to-market requirements.

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Our Strategy

Our objective is to maintain and extend our leadership position by pursuing the following key elements of our strategy:

Leverage Our Technology to Gain Market Share. As fiber lasers become more widely accepted, we plan to leverage our brand and position as the leader in developing and commercializing fiber lasers to increase our market share in the broader market.

Target New Applications for Lasers. We intend to continue to enable and penetrate additional applications where lasers have not traditionally been used. We believe that fiber laser technology can overcome many of the limitations that have slowed the adoption of traditional lasers. We intend to target applications where higher power, portability, efficiency, size and flexible fiber cable delivery can lead customers to adopt fiber lasers instead of non-laser solutions.

Expand Our Product Portfolio. We plan to continue to invest in research and development to add additional wavelengths, power levels and other parameters while also improving beam quality. In 2008, we started to sell our proprietary diodes to the merchant market.

Optimize Our Manufacturing Capabilities. We plan to seek further increases in the automation of our component manufacturing processes and device assembly to improve component yields and increase the power outputs and capacities of the various components that we make. We intend to leverage our technology and operations expertise to manufacture additional components in order to reduce costs, ensure component quality and ensure supply.

Expand Global Reach to Attract Customers Worldwide. In 2007, more than 72% of our sales came from international customers. We intend to capitalize on and grow our global customer base by opening new application development centers as well as sales and service offices in Russia, China, Europe and the United States.

Products

We design and manufacture a broad range of high-performance optical fiber-based lasers and amplifiers. We also make packaged diodes, direct diode laser systems and communications systems that utilize our optical fiber-based products. Many of our products are designed to be used as general purpose energy or light sources, making them useful in diverse applications and markets.

Our products are based on a common proprietary technology platform using many of the same core components, such as semiconductor diodes, specialty fibers, beam combiners, isolators, polarizers, splitters and modulators, which we configure to our customers specifications. Our engineers and scientists work closely with OEMs and end users to develop and customize our products for their needs. Because of our flexible and modular product architecture, we offer products in different configurations according to the desired application, including modules, rack-mounted units and tabletop units. Our engineers and other technical experts work directly with the customer in our applications centers to develop and configure the optimal solution for each customer s manufacturing requirements. We also make complementary products and components that are used with our ultra-high power products, such as fiber couplers, beam delivery cables and chillers. In addition, we make marking systems for sale in India and China.

Lasers

Our laser products include low (1 to 99 watts), medium (100 to 999 watts) and high (1,000 watts and above) output power lasers from 1 to 2 microns in wavelength. These lasers either may be continuous wave (CW) or may be modulated at different rates. We offer several different types of lasers, which are defined by the type of gain medium

they use. These are ytterbium, erbium, thulium and Raman. We also sell fiber pigtailed packaged diodes and fiber coupled direct diode laser systems that use semiconductor diodes rather than optical fibers as their gain medium. In addition, we offer high-energy pulsed lasers, multi-wavelength lasers, tunable lasers, single-polarization and single-frequency lasers, as well as other versions of our products.

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We believe that we produce the highest power solid-state lasers in the industry. Our ytterbium fiber lasers can reach power levels over 40,000 watts. We also make single-mode output ytterbium fiber lasers with power levels of up to 3,000 watts and single-mode output erbium and thulium fiber lasers with power levels of up to 400 watts. Our compact, durable design and integrated fiber optic beam delivery allows us to offer versatile laser energy sources and simple laser integration for complex production processes without compromising quality, speed or power.

Amplifiers

Our amplifier products range from milliwatts to up to 500 watts of output power from 1 to 2 microns in wavelength. We offer erbium-doped fiber amplifiers, commonly called EDFAs, Raman amplifiers and integrated communications systems that incorporate our amplifiers. These products are predominantly deployed in broadband networks and dense wavelength division multiplexing, or DWDM, networks. We also offer ytterbium and thulium specialty fiber amplifiers and broadband light sources that are used in advanced applications. In addition, we sell single-frequency, linearly polarized and polarization-maintaining versions of our amplifier products. As with our fiber lasers, our fiber amplifiers offer some of the highest output power levels and highest number of optical outputs in the industry. We believe our line of fiber amplifiers offers the best commercially available output power and performance.

The following summarizes some of our product offerings by product family, primary markets and representative applications for each product family:

Product Family Lasers	**Primary Markets**	**Representative Applications**
Pulsed Ytterbium Lasers	Manufacturing Semiconductor Solar Display Panels Microelectronics Jewelry	Marking and engraving Coating removal Cutting Diamond marking Scribing
Multi-Mode Output Ytterbium Lasers	Automobiles Shipbuilding Aerospace Heavy Industry ConstructionNuclear	Welding of automotive tailored blanks and transmissions Remote welding of automotive frames, doors and seats Cutting of hydro-formed automotive frames Pipe welding Materials destruction testing Plate welding and cutting
Single-Mode Output Ytterbium Lasers	Manufacturing Printing Consumer Medical Devices Microelectronics	Engraving of printing rolls and plates Stent cutting Welding Ceramic scribing Optical trapping of cells Cutting
Diode Lasers	Manufacturing Computers Aerospace Medical	Welding and bending of disk drive flexure Plastic welding Urology and dental

Erbium Fiber Lasers	Medical Manufacturing Aerospace Rapid Prototyping Scientific Research Communications	Skin rejuvenation and stretch mark removal Pumping of crystal lasers Photonic doppler velocimetry Interferometry Remote sensing Non-wireline communications
Tunable, Ytterbium, Erbium and Thulium Fiber Lasers	Scientific Research Medical Instrumentation	Spectroscopy Optical fiber and component characterization Component stress-testing Diagnostic equipment

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Product Family	Primary Markets	Representative Applications
Pulsed Erbium Fiber Lasers	Aerospace Manufacturing Scientific Research	Obstacle detection LIDAR and 3-D mapping Atmospheric and remote sensing
Thulium Lasers	Aerospace Manufacturing Scientific Research Medical	Optical pumping of lasers Pollution sensing Medical treatments Micromachining of plastics
Raman Lasers	Communications Scientific Research	Distributed Raman amplification Remote amplifier pumping Optical pumping of lasers
Picosecond Pulsed Lasers	Scientific Research Manufacturing	Hole drilling Memory repair
Amplifiers		
Erbium Fiber Amplifiers	Broadband Access Cable TV DWDM Instrumentation Scientific Research	Telephony, video on demand and high-speed internet Ultra-long-haul transmission Non-wireline optical communications Coherent and spectral beam combining High-power component testing
Raman Amplifiers	DWDM Instrumentation Scientific Research	Distributed Raman amplification Remote amplifier pumping Repeaterless submarine systems WDM Raman amplifiers
Communications Systems	DWDM	200Km to 400Km long-span transmissions 2.5 and 10 gbit/second transmissions
Ytterbium Fiber Amplifiers	Scientific Research Life Sciences	Coherent and spectral beam combining Detection and sensing systems Non-linear frequency conversion

Materials Processing

The most significant materials processing applications for fiber lasers are marking, printing, welding and cutting. Other applications include micromachining, surface treatment, drilling, soldering, annealing, rapid prototyping and laser-assisted machining.

Marking, Engraving and Printing Applications. With the increasing need for source traceability, component identification and product tracking as a means of reducing product liability and preventing falsification, as well as the demand for modern robotic production systems, industrial manufacturers are increasingly demanding marking systems capable of applying serialized alphanumeric, graphic or bar code identifications directly onto their manufactured

components. Laser engraving is similar to marking but forms deeper grooves in the material. In contrast to conventional acid etching and ink-based technologies, lasers can mark a wide variety of metal and non-metal materials, such as ceramic, glass and plastic surfaces, at high speeds and without contact by changing the surface structure of the material or by engraving. Laser marking systems can be easily integrated into a customer s production process and do not subject the item being marked to mechanical stress.

In the semiconductor industry, lasers are typically used to mark wafers and integrated circuits. In the electronics industry, lasers typically are used to mark electrical components such as contactors and relays, printed circuit boards and keyboards. With the increase in marking speed in the past few years, the cost of laser marking has decreased. In the photovoltaic (solar panel) industry, pulsed lasers increasingly are used to remove materials and to scribe (cut) solar cells. The high beam quality, increased peak output powers, flexible fiber delivery and competitive price of fiber lasers have accelerated the adoption of fiber lasers in these low-power applications.

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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 OEMs in the printing industry to employ fiber lasers for alternative computer-to-plate, or CTP, processes. As a result, our ytterbium fiber lasers are now widely used for CTP printing, an environmentally friendly process that saves production time by writing directly to plates and greatly reduces chemical waste.

Welding Applications. Laser welding offers several important advantages over conventional welding technology as it is non-contact, easy to automate, provides high process speed and results in narrow-seamed, high quality welds that generally require little or no post-processing machining. Parts can be accurately machined before welding because laser welding does not overly heat or otherwise damage or distort the material being processed. The high beam quality of our fiber lasers coupled with high CW power offers deep penetration welding as well as shallow conduction mode welding. High modulation frequencies offer very high throughput in pulsed applications. In addition, fiber lasers can be focused to a small spot with extremely long focal lengths, enabling remote welding on the fly, a flexible method of three-dimensional welding in which the laser beam is positioned by a robot-guided scanner. Such remote welding stations equipped with fiber lasers are used for welding door panels and the multiple welding of spot and lap welds over the entire auto body frame. Typically, mid- to high-power ytterbium fiber lasers are used in welding applications.

Cutting Applications. Laser-based cutting technology has several advantages compared to alternative technologies. Laser cutting is fast, flexible, highly precise and can be used to cut complex contours on flat, tubular or three-dimensional materials. The laser source can be programmed to process many different kinds of materials such as steel, aluminum, brass, copper, glass, ceramic and plastic at various thicknesses. Laser cutting technology is a non-contact process that is easy to integrate into an automated production line and is not subject to wear of the cutting medium. We sell low, mid and high-power ytterbium fiber lasers for laser cutting. The operating wavelength, multi-kilowatt power, high beam quality, wide operating power range, power stability and small spot size are some of the qualities offered by fiber lasers for most cutting applications.

Emerging Technologies and Applications. Robotic production methods are increasing in use, driven by their lower production costs, flexibility and consistency. Fiber lasers complement the capabilities of robots with their flexible fiber delivery, high-power beam and low beam divergence. In 2007, fiber lasers were successfully integrated with robotic systems in applications such as tailored blanks. Visible lasers are also an emerging technology. Visible lasers can be used in materials processing applications such as ceramic processing, holography and micro-electronics.

Advanced Applications

Our fiber lasers and amplifiers are utilized by commercial firms and by academic and government institutions worldwide for manufacturing of commercial systems and for research in advanced technologies and products. These markets may use specialty products developed by us or commercial versions of our products.

Obstacle Warning. Our products are used aboard aircraft for obstacle warning and 3-dimensional mapping of earth surfaces.

Special Projects. Due to the high power, compactness, performance, portability, ruggedness and electrical efficiency of our fiber lasers and amplifiers, we sell our commercial products for government research and projects. These include materials testing, ordnance destruction, coherent beam combining, advanced communications and research.

Research and Development. Our products are used in a variety of applications for research and development by scientists and industrial researchers. In addition, our lasers and amplifiers are used to design, test and characterize components and systems in a variety of markets and applications.

Optical Pumping and Harmonic Generation. Several types of our lasers are used to optically pump other solid-state lasers and for harmonic generation and parametric converters to support research in sensing,

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medical and other scientific research in the infrared and visible wavelength domains. Our lasers are used as a power source for these other lasers. Green visible lasers are used to pump titanium sapphire lasers. Visible lasers can be used in optical displays, planetariums and light shows.

Optical Communication. We provide high-power EDFAs and ytterbium fiber amplifiers for deployment in both point-to-point and point-to-multipoint free space optical networks. These networks permit communications between two or more points on land or in the sky without the use of fiber optic lines or radio or microwaves.

Remote Sensing. Our products are used in light detection and ranging, also called LIDAR, a laser technique for remote sensing. Optical fiber can be used as a sensor for measuring changes in temperature, pressure and gas concentration in oil wells, atmospheric and pollution measurements and seismic exploration.

Communications

We design and manufacture a DWDM transport system with varying output power and wavelengths and a full range of fiber amplifiers and Raman pump lasers that enhance data transmission in broadband access and DWDM optical networks. We are leveraging our high-power diode and fiber technology through the qualification and sale of high-value integrated solutions for network suppliers.

DWDM. DWDM is a technology that expands the capacity of optical networks, allowing service providers to extend the life of existing fiber networks and reduce operating and capital costs by maximizing bandwidth capacity. We provide a broad range of high-power products for DWDM applications including EDFAs and Raman lasers. We provide a DWDM transport system that offers service providers and private network operators a simple, flexible, optical layer solution scalable from 8 to 40 channels that operates at 10 gibabits per second per channel.

Broadband Access. The delivery to subscribers of television programming and Internet-based information and communication services is converging, driven by advances in IP technology and by changes in the regulatory and competitive environment. Fiber optic lines offer connection speeds of up to 50 megabits per second, or 50 times faster than digital subscriber lines (DSL) or cable links. We offer a series of specialty multi-port EDFAs and cable TV nodes and transmitters that support different types of passive optical network architectures, enabling high speed data, voice, video on demand and high definition TV. We provide an EDFA that supports up to 32 ports, which allows service providers to support a high number of customers in a small space, reducing overall power consumption and network cost. End users for our products include communications network operators for video wavelength division multiplexing overlay, as well as cable and multiple service operators for video signal and hybrid fiber coaxial cable.

Medical

We sell our commercial fiber and diode lasers to OEMs that incorporate our products into their medical laser systems. Continuous wave and pulsed lasers from 1 to 150 watts and diode laser systems can be used in medical and biomedical applications. Aesthetic applications addressed by lasers include skin rejuvenation, skin resurfacing and stretch mark removal. Purchasers use our diode lasers in urological applications and dental procedures. Fiber lasers have the ability to fine-tune optical penetration depth and absorption characteristics and can be used for ear, nose and throat, urology, gynecology and other surgical procedures. Visible lasers can be used in prostate, ophthalmic and dental procedures in addition to photodynamic therapies.

Technology

Our products are based on our proprietary technology platform that we have developed and refined since our formation. The following technologies are key elements in our products.

Specialty Optical Fibers

We have extensive expertise in the disciplines and techniques that form the basis for the multi-clad active and passive optical fibers used in our products. Active optical fibers form the laser cavity or gain medium in

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which lasing or amplification of light occurs in our products. Passive optical fibers deliver the optical energy created in our products. Our active fibers consist of an inner core that is infused with the appropriate rare earth ion, such as ytterbium, erbium or thulium, and outer cores of un-doped glass having different indices of refraction. We believe that our large portfolio of specialty active and passive optical fibers has a number of advantages as compared to commercially available optical fibers. These include higher concentrations of rare earth ions, fibers that will not degrade at the high power levels over the useful life of the product, high lasing efficiency, ability to withstand high optical energies and temperatures and scalable side-pumping capability. Our ability to quickly optimize our proprietary active and passive optical fibers allows us to provide a variety of innovative fiber devices in customizable configurations.

Semiconductor Diode Laser Processing and Packaging Technologies

Another key element of our technology platform is that we use multiple multi-mode, or broad area, single-emitter diodes rather than diode bars or stacks as a pump source. We believe that multi-mode single-emitter diodes are the most efficient and reliable pumping source presently available, surpassing diode bars and stacks in efficiency, brightness and reliability. Single-emitter diodes have substantially reduced cooling requirements and have estimated lifetimes of more than 200,000 hours at high operating currents, compared to typical lifetimes of 10,000 to 20,000 hours for diode bars.

We developed advanced molecular beam epitaxy techniques to grow alumina indium gallium arsenide wafers for our diodes. This method yields high-quality optoelectronic material for low-defect density and high uniformity of optoelectronic parameters. In addition, we have developed numerous proprietary wafer processes and testing and qualification procedures in order to create a high energy output in a reliable and high-power diode. We package our diodes in hermetically sealed pump modules in which the diodes are combined with an optical fiber output. Characteristics such as the ability of the package to dissipate heat produced by the diode and withstand vibration, shock, high temperature, humidity and other environmental conditions are critical to the reliability and efficiency of the products.

Side Pumping of Fibers and Fiber Block Technologies

Our technology platform allows us to efficiently combine a greater number of multi-mode single-emitter semiconductor diodes with our active optical fibers that are used in all of our products. A key element of this technology is that we pump our fiber lasers through the cladding surrounding the active core. We splice our specialty active optical fibers with other optical components and package them in a sealed box, which we call a fiber block. The fiber blocks are compact and eliminate the risk of contamination or misalignment due to mechanical vibrations and shocks as well as temperature or humidity variations. Our design is scalable and modular, permitting us to make products with high output power by coupling a large number of diodes with fiber blocks, which can be combined in parallel and serially.

High-Stress Testing

We employ high-stress techniques in testing components and final products that help increase reliability and accelerate product development. For example, we test all of our diodes with high current and temperatures to accelerate aging. We also have built a large database of diode test results that allows us to predict the estimated lifetime of our diodes. This testing allows us to eliminate defective diodes prior to further assembly and thus increase reliability.

Customers

We sell our products globally to OEMs, system integrators and end users in a wide range of diverse markets who have the in-house engineering capability to integrate our products into their own systems. We have hundreds of customers worldwide. Our end markets include materials processing (comprised of general manufacturing, automotive, heavy industry, aerospace, consumer products, semiconductor and electronics customers), advanced applications (comprised of commercial companies, universities, research entities and government entities), communications (comprised of system integrators, utilities and municipalities) and

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medical (medical laser systems manufacturers) . We believe that our customer and end market diversification minimizes dependence on any single industry or group of customers.

The following table shows the allocation of our net sales (in thousands) among our principal markets:

	Year Ended December 31,					
	2007		2006		2005	
Materials Processing	$ 140,044	74.2%	$ 97,600	68.2%	$ 59,659	61.9%
Advanced Applications	25,047	13.3	19,224	13.4	13,656	14.2
Communications	13,062	6.9	15,222	10.6	15,751	16.3
Medical	10,524	5.6	11,179	7.8	7,319	7.6
Total	$ 188,677	100.0%	$ 143,225	100.0%	$ 96,385	100.0%

SUNX Limited, a provider of laser marking systems, accounted for 7%, 10% and 13% of our net sales for the years ended December 31, 2007, 2006 and 2005, respectively.

Our net sales (in thousands) were derived from customers in the following geographic regions:

	Year Ended December 31,					
	2007		2006		2005	
North America(1)	$ 53,272	28.2%	$ 45,519	31.8%	$ 38,512	40.0%
Europe	72,795	38.6	48,491	33.9	23,882	24.8
Asia and Australia	62,564	33.2	48,769	34.0	33,569	34.8
Rest of World	46	0.0	446	0.3	422	0.4
Total	$ 188,677	100.0%	$ 143,225	100.0%	$ 96,385	100.0%

(1) The substantial majority of sales in North America are to customers in the United States.

Backlog

At December 31, 2007, our backlog of orders scheduled for shipment (generally within one year) was approximately $72.6 million compared to $51.8 million at December 31, 2006. Orders used to compute backlog are generally cancelable without substantial penalties. Historically, the rate of cancellation experienced by us has not been significant. We manage the risk of cancellation by establishing the right to charge a cancellation fee that generally covers a portion of the purchase price, any materials and development costs incurred prior to the order being cancelled. Our ability to enforce this right depends on many factors including, but not limited to, the customer s requested length of delay, the number of other outstanding orders with the customer and our ability to quickly convert the cancelled order to another sale.

The Company anticipates shipping a substantial majority of the present backlog during fiscal year 2008. However, the Company s backlog at any given date is not necessarily indicative of actual sales for any future period.

Sales, Marketing and Support

We market our products internationally primarily through our direct sales force and also through agreements with independent sales representatives and distributors. We have sales offices in the United States, Germany, Russia, Italy, China, Japan, South Korea, India and the United Kingdom. Our independent sales representatives and distributors are located in the United States, Russia, Japan, Brazil, Mexico and other parts of the world. Only one of these arrangements is on an exclusive basis. Foreign sales to customers are generally priced in local currencies and are therefore subject to currency exchange fluctuations.

We maintain a customer support and field service staff in our major markets within the United States, Canada, Europe, Russia, China, Japan, India and South Korea. We work closely with customers, customer groups and independent representatives to service equipment, train customers to use our products and explore

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additional applications for our technologies. We typically repair products at our facilities or at customer sites. We plan to expand our support and field service, particularly in locations where customer concentration or volume requires local service capabilities.

We typically provide one to three-year parts and service warranties on our lasers and amplifiers. Most of our sales offices provide support to customers in their respective geographic areas. Warranty reserves have generally been sufficient to cover product warranty repair and replacement costs.

Manufacturing

Vertical integration is one of our core business strategies through which we control our proprietary processes and technologies as well as the supply of key components and assemblies. We believe that our vertically integrated business model gives us the following advantages:

maintaining a technological lead over competitors;

reducing component and final product costs as volumes increase;

ensuring access to critical components, enabling us to better meet customer demands;

controlling performance, quality and consistency; and

enabling rapid development and deployment of new products and technologies.

Our vertically integrated manufacturing operations include optical preform making, specialty fiber drawing, semiconductor wafer growth, diode processing and packaging, specialty optical component manufacturing, fiber block and fiber module assembly for different power units, software and electronics development, final assembly, as well as testing, tool manufacturing and automated production systems. In 2007, we added additional production capabilities, including three multi-wafer growth reactors, diode test stations, fiber pre-form and fiber drawing equipment, low, mid and high-power production and testing, in order to increase our capacity as well as reduce the risks associated with our production process.

We operate our own semiconductor foundry for the production of the multi-mode single-emitter diodes. Diodes are the pumps that are used as the light source in each device we make. We also process, package and extensively test all of our diodes. Since pump diodes represent a significant component cost of the final laser or amplifier, we have chosen to develop internal manufacturing capabilities for diodes. As a result of our high volume production levels of pump diodes, proprietary processes and use of limited chip designs, we have been able to increase yields, lower component costs and assure high quality. We also design, manufacture and optimize many of our own test instruments, diode test racks, robotic and automated assembly tools and machines.

We developed these proprietary components, manufacturing tools, equipment and techniques over many years in an effort to address the major issues that had been inhibiting the development of fiber laser technology and to provide products that differentiate us from our competitors. We believe that the proprietary components, manufacturing tools, equipment, techniques and software utilized in all of our product lines provide extensive barriers to potential competitors. Generally, we do not sell our proprietary components to third parties, except that in 2008, we started selling our diodes to the merchant market. Using our technology platform, we configure standard products based upon each customer s specifications. Through our vertically integrated manufacturing operations, we can develop, test and produce new products and configurations with higher performance and reliability and in less time than by working with external vendors. We have developed proprietary testing methodologies that allow us to develop higher power

components and products in short periods of time, enable us to introduce products to the market more quickly, capitalize on new opportunities and provide superior service to our customers.

Our in-house manufacturing generally includes only those operations and components that are critical to the protection of our intellectual property, the reduction of our costs or the achievement of performance and quality standards. We purchase from vendors common as well as specialized mechanical, electrical and optical parts and raw materials, such as printed circuit boards, wafer substrates and various optical components.

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Research and Development

We have extensive research and development experience in laser materials, fiber and optoelectronic components. We have assembled a team of scientists and engineers with specialized experience and extensive knowledge in fiber lasers and amplifiers, critical components, testing and manufacturing process design.

We focus our research and development efforts on designing and introducing new and improved standard and customized products and the mass production of components that go into our products. In addition to our cladding-pumped specialty fiber platform, we have core competencies in high-power multi-mode semiconductor laser diodes, diode packaging, specialty active and passive optical fibers, high-performance optical components, fiber gain blocks and fiber modules, as well as splicing and combining techniques and high-stress test methods. Our research and development efforts are aided by our vertical integration and our proprietary high-stress testing techniques that result in accelerated development cycles. The strategy of developing our proprietary components has allowed us to leverage our optical experience and large volume requirements to lower the cost of our products. We concentrate our research and development efforts on advancements in performance as well as capacity to hold and produce higher optical power levels.

Our research and development efforts are also directed at expanding our product line by increasing power levels, improving beam quality and electrical efficiency, decreasing the size of our products and lowering the cost per watt. We also are engaged in research projects to expand the spectral range of products that we offer. Our team of experienced scientists and engineers work closely with many of our customers to develop and introduce custom products that address specific applications and performance requirements.

We incurred research and development costs of approximately $9.5 million in 2007, $6.5 million in 2006 and $5.8 million in 2005. We plan to continue our commitment to research and development and to introduce new products, systems and complementary products that would allow us to maintain our competitive position. See Item 7, Management s Discussion and Analysis of Financial Condition of Results of Operations.

Intellectual Property

We seek to protect our proprietary technology primarily through U.S. and foreign laws affording protection for trade secrets, and to seek U.S. and foreign patent, copyright and trademark protection of our products and processes where appropriate. Historically, we relied primarily on trade secrets, technical know-how and other unpatented proprietary information relating to our product development and manufacturing activities. We seek to protect our trade secrets and proprietary information, in part, by requiring our employees to enter into agreements providing for the maintenance of confidentiality and the assignment to us of rights to inventions that they make while we employ them. We also enter into non-disclosure agreements with our consultants and suppliers to protect confidential information delivered to them. We believe that our vertical integration, including our long experience in making a wide range of specialty and high-power capacity components, as well as our technology platform make it difficult for others to reverse engineer our products.

We have increased our efforts to expand our patent portfolio. In February 2008, we purchased a portfolio of photonics patents from British Telecommunications plc that included approximately 100 U.S. patents and over 400 foreign counterparts in the fields of optical fiber lasers and amplifiers, semiconductor devices, integrated optics, fiber gratings, high-speed systems and optical networking. In addition, as of March 1, 2008, we have 15 patent applications filed and pending with the U.S. Patent and Trademark Office. In 2007, we were issued a patent by the U.S. Patent and Trademark Office relating to optical fibers.

Intellectual property rights, including those that we own and those of others, involve significant risks. See Item 1A, Risk Factors-Our inability to Protect Our Intellectual Property and Proprietary Technologies Could Result in the Unauthorized Use of Our Technologies by Third Parties, Hurt Our Competitive Position and Adversely Affect Our Operating Results.

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Competition

Our markets are competitive and characterized by rapidly changing technology and continuously evolving customer requirements. We believe that the primary competitive factors in our markets are:

- product performance and reliability;
- quality and service support;
- price and value to the customer;
- ability to manufacture and deliver products on a timely basis;
- ability to achieve qualification for and integration into OEM systems;
- ability to meet customer specifications; and
- ability to respond quickly to market demand and technological developments.

We believe we compete favorably with respect to these criteria. In the materials processing market, the competition is fragmented and includes a large number of competitors. We compete with makers of high-power conventional CO_2 and solid-state lasers, including Fanuc, Lasag Ltd., Rofin-Sinar Technologies, Inc., and Trumpf Inc., and makers of mid and low-power conventional CO_2 and solid-state lasers such as Coherent, Inc., the Synrad, Inc. subsidiary of Excel Technology, Inc., GSI Group Inc., Newport Corporation and Rofin-Sinar Technologies, Inc. We also compete with fiber laser makers including The Furukawa Electric Co., Ltd., Keopsys SA, Mitsubishi Cable Industries, Ltd., Miyachi Unitek Corporation, MPB Communications Inc., Rofin-Sinar Technologies, Inc., SPI Lasers plc and JDS Uniphase Corporation for low and/or mid-power lasers. We believe that we compete favorably with other makers of fiber lasers on price, service, installed base and performance with respect to low and mid-power fiber lasers. While we are currently a technology and price leader in fiber lasers and have a large share of fiber laser sales as compared to competitors that make fiber lasers, we expect competition from established laser makers that may have started or may start programs to develop and sell fiber lasers or alternative new solid state laser technologies. Because many of the components required to develop and produce low-power fiber lasers are becoming increasingly available, barriers to entry are relatively low and we expect new competitive products to be introduced. Several established laser makers, including Trumpf Inc., Newport Corporation, The Furukawa Electric Co., Ltd. and others, have recently introduced fiber lasers or have announced plans to develop fiber-based lasers, each of which would compete with our products. Many of the conventional laser companies are larger and have substantially greater financial, managerial and technical resources, more extensive distribution and service networks, greater sales and marketing capacity, and larger installed customer bases than we do. We also compete in the materials processing, medical and advanced applications markets with end users who produce their own solid-state and gas lasers as well as with manufacturers of non-laser methods and tools, such as resistance welding and cutting dies in the materials processing market and scalpels in the medical market.

In the communications market, our principal competitors are manufacturers of mid-power fiber amplifiers and DWDM systems, such as Avanex Corporation, Bookham Inc., the Scientific-Atlanta division of Cisco Systems, Inc. (Scientific-Atlanta), Emcore Corporation, JDS Uniphase Corporation and MPB Communications Inc. We believe that we compete favorably with other high-power fiber amplifier producers with respect to price, product performance and output power. The fiber amplifier market is more established than the fiber laser market and technological change has not occurred as rapidly as it has in the case of fiber lasers. Many of our competitors in this market are larger than we are and have substantially greater financial, managerial and technical resources, more extensive distribution and

service networks, greater sales and marketing capacity, and larger installed customer bases than we do.

Employees

As of December 31, 2007, we had approximately 1,300 full-time employees, including approximately 80 in research and development, 1,020 in manufacturing operations, 70 in sales, service and marketing, and 130 in general and administrative functions. Of our total full-time employees at our principal facilities,

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approximately 380 were in the United States, 470 were in Germany, 320 were in Russia and 50 were in China. We have never experienced a work stoppage and none of our employees is subject to a collective bargaining agreement. We believe that our current relations with our employees are good.

Government Regulation

Regulatory Compliance

The majority of our laser and amplifier products sold in the United States are classified as Class IV Laser Products under the applicable rules and regulations of the Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration. The same classification system is applied in the European markets. Safety rules are formulated with Deutsche Industrie Norm (i.e., German Industrial Standards) or ISO standards, which are internationally harmonized. CDRH regulations generally require a self-certification procedure pursuant to which a manufacturer must submit a filing to the CDRH with respect to each product incorporating a laser device, make periodic reports of sales and purchases and comply with product labeling standards, product safety and design features and informational requirements. Our products applications can result in injury to human tissue if directed at an individual or otherwise misused. The CDRH is empowered to seek fines and other remedies for violations of their requirements. We believe that our products are in material compliance with applicable laws and regulations relating to the manufacture of laser devices.

Environmental Regulation

Our operations are subject to various federal, state, local and international laws governing the environment, including those relating to the storage, use, discharge, disposal, product composition and labeling of, and human exposure to, hazardous and toxic materials. We believe that our operations are in material compliance with applicable environmental protection laws and regulations.

Although we believe that our safety procedures for using, handling, storing and disposing of such materials comply with the standards required by federal and state laws and regulations, we cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of such an accident involving such materials, we could be liable for damages and such liability could exceed the amount of our liability insurance coverage and the resources of our business.

Availability of Reports

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to such reports are available free of charge on our web site at www.ipgphotonics.com as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the Securities and Exchange Commission (www.sec.gov). We will also provide electronic or paper copies of such reports free of charge, upon request made to our Corporate Secretary.

ITEM 1A. *RISK FACTORS*

The factors described below are the principal risks that could materially adversely affect our operating results and financial condition. Other factors may exist that we do not consider significant based on information that is currently available. In addition, new risks may emerge at any time, and we cannot predict those risks or estimate the extent to which they may affect us.

Our future growth depends upon our ability to penetrate new applications for fiber lasers and increase our market share in existing applications.

Our future growth will depend on our ability to generate sales of fiber lasers in applications where traditional lasers, such as CO_2 and yttrium aluminum garnet (YAG) lasers, have been used or in new and developing markets and applications for lasers where they have not been used previously. To date, a significant portion of our revenue growth has been derived from sales of fiber lasers primarily for applications where CO_2

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and YAG lasers historically have been used. In order to increase market demand for our fiber laser products, we will need to devote substantial resources to:

demonstrate the effectiveness of fiber lasers in new applications;

increase our direct and indirect sales efforts;

extend our product line to address new applications for our products;

continue to reduce our manufacturing costs and enhance our competitive position; and

effectively service and support our installed product base.

If we are unable to implement our strategy to develop new applications for our products, our revenues, operating results and financial condition could be adversely affected. We cannot assure you that we will be able to successfully implement our business strategy. In addition, our newly developed or enhanced products may not achieve market acceptance or may be rendered obsolete or less competitive by the introduction of new products by other companies.

If fiber lasers do not achieve broader market acceptance or if market penetration occurs more slowly than we expect, prospects for our growth and profitability may be negatively impacted.

The fiber laser market is relatively new when compared to the conventional laser market and our future success depends on the development and broader market acceptance of fiber lasers. Potential customers may be reluctant to adopt fiber lasers as an alternative to traditional lasers, such as CO_2 and YAG, and non-laser methods, such as mechanical tools. Such potential customers may have substantial investments and know-how related to their existing laser and non-laser technologies, and may perceive risks relating to the reliability, quality, usefulness and cost-effectiveness of fiber lasers when compared to other laser or non-laser technologies available in the market. Many of our target markets, such as the automotive, machine tool and other manufacturing, communications and medical industries, have historically adopted new technologies slowly. These markets often require long test and qualification periods or lengthy government approval processes before adopting new technologies. As a result, we may expend significant resources and time to qualify our products for a new customer application, and we cannot assure that our products will be qualified or approved for such markets. If acceptance of fiber laser technology, and of our fiber lasers in particular, does not continue to grow within the markets that we serve, then the opportunities to increase our revenues and profitability may be severely limited.

We may not be able to effectively manage our growth and we may need to incur significant costs to address the operational requirements related to our growth, either of which could harm our business and operating results.

We have been experiencing a period of significant growth and expansion, both in the United States and internationally, which has required, and will continue to require, increased efforts of our management and other resources. Our recent and anticipated growth has placed, and is expected to continue to place, significant strain on our research and development, sales and marketing, operational and administrative resources. To manage our growth, we will need to continue to improve our operational and financial systems, expand, train and manage our employees and manage our working capital requirements. For example, we must implement new modules of our management information system, hire and train new sales representatives, service and application personnel, and expand our supply chain management and quality control operations. This may require substantial managerial and financial resources, and our efforts in this regard may not be successful. If we fail to adequately manage our expected growth, or to improve our operational, financial and management information systems, or fail to effectively motivate or manage our new and future employees, the quality of our products and the management of our operations could suffer and our

operating results could be adversely affected.

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Our vertically integrated business results in high levels of fixed costs and inventory levels that may adversely impact our gross profits and our operating results in the event that demand for our products declines or we maintain excess inventory levels.

We have a high fixed cost base due to our vertically integrated business model, including the fact that approximately 76% of our over 1,300 employees as of December 31, 2007 were employed in our manufacturing operations. We cannot adjust these fixed costs quickly to adapt to rapidly changing market conditions. Our gross profit, in absolute dollars and as a percentage of net sales, is greatly impacted by our sales volume, the corresponding absorption of fixed manufacturing overhead expenses and manufacturing yields. In addition, because we are a vertically integrated manufacturer and design and manufacture our key specialty components, insufficient demand for our products may subject us to the risks of high inventory carrying costs and increased inventory obsolescence. If we expand capacity and production levels too quickly in relation to expected demand, we may need to record write-downs for excess or obsolete inventory. Because we are vertically integrated, the rate at which we turn inventory has historically been low when compared to our cost of sales. We do not expect this to change significantly in the future and believe that we will have to maintain a relatively high level of inventory compared to our cost of sales. As a result, we continue to expect to have a significant amount of working capital invested in inventory and changes in our level of inventory to lead to an increase in cash generated from our operations when inventory is sold or a decrease in cash generated from our operations at times when the amount of inventory increases. We may be required to write-down inventory costs in the future as we have done in the past, and the high inventory costs may have an adverse effect on our gross profits and our operating results.

We may experience lower than expected manufacturing yields, which would adversely affect our gross margins.

The manufacture of semiconductor diodes and the packaging of them is a highly complex process. Manufacturers often encounter difficulties in achieving acceptable product yields from diode and packaging operations. We have from time to time experienced lower than anticipated manufacturing yields for our diodes and packaged diodes. This occurs during the production of new designs and the installation and start-up of new process technologies. If we do not achieve planned yields, our product costs could increase resulting in lower gross margins, and key component availability would decrease.

Our capacity expansion plans for manufacturing and operations may not be appropriate for future levels of demand and may adversely affect our gross margins.

In response to an increase in demand for our fiber lasers, we started adding substantial manufacturing capacity at our facilities in the United States, Germany and Russia beginning in early 2005, and we are continuing to expand our capacity further. A significant portion of our manufacturing facilities and production equipment, such as our semiconductor production and processing equipment, diode packaging equipment and diode burn-in stations, are special- purpose in nature and cannot be adapted easily to make other products. If the demand for fiber lasers or amplifiers does not increase from current levels, we may have significant excess manufacturing capacity, which could in turn adversely affect our gross margins. If demand for fiber lasers or amplifiers increases substantially more than we anticipate, our manufacturing capacity may not be adequate to meet the increased customer demand. As a result, we might not be able to fulfill customer orders in a timely manner, which could adversely affect our customer relationships and operating results. Moreover, our efforts to increase our production capacity may not succeed in enabling us to manufacture the required quantities of our products in a timely manner or at gross profit margins that we have achieved in the past. As a result, the profit margins we ultimately achieve on sales of fiber lasers and amplifiers may be lower than our historical profit margins.

To maintain our competitive position as the leading developer and manufacturer of fiber lasers and to meet anticipated increased demand for our products, we intend to invest significantly in the expansion of our manufacturing and

operations throughout the world. We currently anticipate expanding our manufacturing facilities in the United States, Germany and Russia in the next twelve months and to expand the number and scope of our applications centers, which complement our sales activities. We incurred in the past and will

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incur significant costs associated with the acquisition, build-out and preparation of these new facilities. In total, we had $34 million in capital expenditures in 2007 and we expect our capital expenditures to be approximately $33 million in 2008 in connection with planned expansion. In connection with these projects, we may incur cost overruns, construction delays, labor difficulties or regulatory issues which could cause our capital expenditures to be higher than what we currently anticipate, possibly by a material amount, which would in turn adversely impact our operating results. Any delay in the completion of these projects could also cause us to have insufficient capacity to meet customer demand or could require us to procure materials or components from third-party suppliers, either of which could adversely impact our operating results. Moreover, we may experience higher costs due to yield loss, production inefficiencies and equipment problems until any operational issues associated with the opening of new manufacturing facilities are resolved.

Because we lack long-term purchase commitments from our customers, our sales can be difficult to predict, which could lead to excess or obsolete inventory and adversely affect our operating results.

We generally do not enter into long-term agreements with our customers obligating them to purchase our fiber lasers or amplifiers. Our business is characterized by short-term purchase orders and shipment schedules and, in some cases, orders may be cancelled or delayed without significant penalty. As a result, it is difficult to forecast our revenues and to determine the appropriate levels of inventory required to meet future demand. In addition, due to the absence of long-term volume purchase agreements, we forecast our revenues and plan our production and inventory levels based upon the demand forecasts of our OEM customers, end users, and distributors, which are highly unpredictable and can fluctuate substantially. This could lead to increased inventory levels and increased carrying costs and risk of excess or obsolete inventory due to unanticipated reductions in purchases by our customers. In this regard, we recorded provisions for inventory totaling $2.5 million, $1.0 million and $1.9 million in 2007, 2006 and 2005, respectively. These provisions were recorded as a result of changes in market prices of certain components, the value of those inventories that was realizable through finished product sales and uncertainties related to the recoverability of the value of inventories due to technological changes and excess quantities. If our OEM customers, end users or distributors fail to accurately forecast the demand for our products, fail to accurately forecast the timing of such demand, or are unable to consistently negotiate acceptable purchase order terms with customers, our results of operations may be adversely affected.

We are subject to litigation alleging that we are infringing third-party intellectual property rights. Intellectual property claims could result in costly litigation and harm our business.

In recent years, there has been significant litigation involving intellectual property rights in many technology-based industries, including our own. We face risks and uncertainties in connection with such litigation, including the risk that patents issued to others may harm our ability to do business; that there could be existing patents of which we are unaware that could be pertinent to our business; and that it is not possible for us to know whether there are patent applications pending that our products might infringe upon, since patent applications often are not disclosed until a patent is issued or published. Moreover, the frequency with which new patents are granted and the diversity of jurisdictions in which they are granted make it impractical and expensive for us to monitor all patents that may be relevant to our business.

From time to time, we have been notified of allegations and claims that we may be infringing patents or intellectual property rights owned by third parties. In 2007, we settled two patent infringement lawsuits filed against us. We are presently defending two patent infringement lawsuits. In November 2006, IMRA America, Inc. filed an action against us alleging that certain products we produce, including but not limited to our continuous wave and pulsed fiber lasers and fiber amplifiers, which account for a significant portion of our revenues, infringe one U.S. patent allegedly owned by IMRA America. IMRA America alleges willful infringement, and seeks damages of at least $10 million, treble damages and injunctive relief. IMRA America also alleges inducement of infringement and contributory infringement.

This lawsuit concerns products made, used, sold or offered for sale in or imported into the United States and therefore the lawsuit affects products that account for a substantial portion of our revenues. This lawsuit does not affect revenues that are derived from products that are not made, used, sold or offered for sale in or imported into the United States. The case

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is in the discovery stage and trial has been set for August 5, 2008. We petitioned the U.S. Patent and Trademark Office (the US PTO) to re-examine the patent based on several prior art references. The US PTO is considering our re-examination request. Should the US PTO initiate re-examination, several outcomes are possible, including the cancellation of one or more of the current claims of the patent, confirmation of one or more of the current claims of the patent, amendment of one or more of the current claims of the patent, and/or addition of one or more new claims that do not enlarge the overall scope of the patent claims. An adverse outcome in the US PTO re-examination could have an adverse impact on our defenses in our litigation with IMRA America.

In February 2008, CardioFocus Inc. filed an action against us alleging that our erbium and thulium fiber lasers infringe one patent allegedly owned by CardioFocus and seeks unspecified damages, treble damages and attorneys fees for alleged willful infringement. The plaintiff also alleges inducement of infringement. The patent claims generally relate to a system for transmitting laser energy via an optical fiber to a surgical site. The patent expired in April 2007. We intend to file an answer to the complaint raising several defenses. Although we intend to vigorously contest the claims against us, we cannot predict the outcome of the proceeding.

IMRA America and other parties have notified us that they believe certain of our fiber lasers and amplifiers, or the use of these products, infringe the respective parties patents. There can be no assurance that we will be able to amicably dispose of our pending litigation with IMRA America or CardioFocus, claims or other allegations made against us and claims that may be asserted in the future. The outcome of any litigation, including the pending litigation, is uncertain, as is the outcome of our request for re-examination of the IMRA America patent. Even if we ultimately are successful on the merits of any such litigation or re-examination, legal and administrative proceedings related to intellectual property are typically expensive and time-consuming, generate negative publicity and divert financial and managerial resources. Some litigants against us may have greater financial resources and may be able to sustain the costs of complex intellectual property litigation more easily than we can.

If we do not prevail in any intellectual property litigation brought against us, including the lawsuits brought by IMRA America and Cardio Focus, it could affect our ability to sell our products and materially harm our business, financial condition and results of operations. These developments could adversely affect our ability to compete for customers and increase our revenues. Plaintiffs in intellectual property cases often seek, and sometimes obtain, injunctive relief. Intellectual property litigation commenced against us, including the lawsuits brought by IMRA America and CardioFocus that we are presently defending, could force us to take actions that could be harmful to our business, competitive position, results of operations and financial condition, including the following:

- stop selling our products or using the technology that contains the allegedly infringing intellectual property;
- pay actual monetary damages, royalties, lost profits or increased damages and the plaintiff s attorneys fees, which individually or in the aggregate may be substantial;
- attempt to obtain a license to use the relevant intellectual property, which may not be available on reasonable terms or at all; and
- attempt to redesign the products that allegedly infringed upon intellectual property of others, which may be costly or impractical.

In addition, intellectual property lawsuits can be brought by third parties against OEMs and end users that incorporate our products into their systems or processes. In some cases, we indemnify OEMs against third-party infringement claims relating to our products and we often make representations affirming, among other things, that our products do not infringe on the intellectual property rights of others. As a result, we may incur liabilities in connection with lawsuits against our customers. Any such lawsuits, whether or not they have merit, could be time-consuming to

defend, damage our reputation or result in substantial and unanticipated costs.

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Our inability to protect our intellectual property and proprietary technologies could result in the unauthorized use of our technologies by third parties, hurt our competitive position and adversely affect our operating results.

We rely on patents, trade secret laws, contractual agreements, technical know-how and other unpatented proprietary information to protect our products, product development and manufacturing activities from unauthorized copying by third parties. While we recently acquired a patent portfolio, our patents do not cover all of our technologies, products and product components and may not prevent third parties from unauthorized copying of our technologies, products and product components. We seek to protect our proprietary technology under laws affording protection for trade secrets. We also seek to protect our trade secrets and proprietary information, in part, by requiring employees to enter into agreements providing for the maintenance of confidentiality and the assignment of rights to inventions made by them while employed by us. We have significant international operations and we are subject to foreign laws which differ in many respects from U.S. laws. Policing unauthorized use of our trade secret technologies throughout the world and proving misappropriation of our technologies are particularly difficult, especially due to the number of our employees and operations in numerous foreign countries. The steps that we take to acquire ownership of our employees inventions and trade secrets in foreign countries may not have been effective under all such local laws, which could expose us to potential claims or the inability to protect intellectual property developed by our employees. Furthermore, any changes in, or unexpected interpretations of, the trade secret and other intellectual property laws in any country in which we operate may adversely affect our ability to enforce our trade secret and intellectual property positions. Costly and time-consuming litigation could be necessary to determine the scope of our confidential information and trade secret protection. We also enter into confidentiality agreements with our consultants and other suppliers to protect our confidential information that we deliver to them. However, there can be no assurance that our confidentiality agreements will not be breached, that we will be able to effectively enforce them or that we will have adequate remedies for any breach.

Given our reliance on trade secret laws, others may independently develop similar or alternative technologies or duplicate our technologies and commercialize discoveries that we have made. Therefore, our intellectual property efforts may be insufficient to maintain our competitive advantage or to stop other parties from commercializing similar products or technologies. Many countries outside of the United States afford little or no protection to trade secrets and other intellectual property rights. Intellectual property litigation can be time-consuming and expensive, and there is no guarantee that we will have the resources to fully enforce our rights. If we are unable to prevent misappropriation or infringement of our intellectual property rights, or the independent development or design of similar technologies, our competitive position and operating results could suffer.

Future downturns in the global economy, particularly in the materials processing and communications markets, could have a material adverse effect on our sales and profitability.

Our business depends substantially upon capital expenditures by our customers, particularly by manufacturers in the materials processing and communications markets. Approximately 82% of our revenues in 2007 were in these two markets. Although these industries are broad, they are cyclical and have historically experienced sudden and severe downturns and periods of oversupply, resulting in significantly reduced demand for capital equipment, including the products that we manufacture and market. For the foreseeable future, our operations will continue to depend upon capital expenditures by customers in these markets, which, in turn, depend upon the demand for their products or services. Decreased demand for products and services from customers in these industries during an economic downturn may lead to decreased demand for our products, which would reduce our sales or sales growth rate.

We depend upon internal production and on outside single or limited-source suppliers for many of our key components and raw materials. Any interruption in the supply of these key components and raw materials could adversely affect our results of operations.

We rely exclusively on our own production capabilities to manufacture certain of our key components, such as semiconductor diodes, specialty optical fibers and optical components. We do not have redundant

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production lines for some of our components, such as our diodes and some other components, which are made at a single manufacturing facility. These may not be readily available from other sources at our current costs. If our manufacturing activities were obstructed or hampered significantly, it could take a considerable length of time, or it could increase our costs, for us to resume manufacturing or find alternative sources of supply. Many of the tools and equipment we use are custom-designed, and it could take a significant period of time to repair or replace them. In particular, we use complex tools in the production of our semiconductor diodes that may be taken out of production for months to be serviced and the tools must be recertified before they are put back into production. If we are unable to successfully recommission these tools in a timely fashion, our results of operations and business may be adversely affected. Our three major manufacturing facilities are located in Oxford, Massachusetts; Burbach, Germany; and Fryazino, Russia. If, as a result of a flood, fire, natural disaster, political unrest, act of terrorism, war, outbreak of disease or other similar event, any of our three major manufacturing facilities or equipment should become inoperable, inaccessible, damaged or destroyed, our business could be adversely affected to the extent that we do not have redundant production capabilities.

Also, we purchase certain raw materials used to manufacture our products and other components, such as semiconductor wafer substrates, modulators and high-power beam delivery products, from single or limited-source suppliers. In general, we have no long-term contractual supply arrangements with these suppliers. Some of our suppliers are also our competitors. Furthermore, other than our current suppliers, there are a limited number of entities from whom we could obtain these supplies. We do not anticipate that we would be able to purchase these components or raw materials that we require in a short period of time or at the same cost from other sources in commercial quantities or that have our required performance specifications. Any interruption or delay in the supply of any of these components or materials, or the inability to obtain these components and materials from alternate sources at acceptable prices and within a reasonable amount of time, could adversely affect our business. If our suppliers face financial or other difficulties or if there are significant changes in demand for the components and materials we obtain from them, they could limit the availability of these components and materials to us, which in turn could adversely affect our business.

We rely on the significant experience and specialized expertise of our senior management and scientific staff and if we are unable to retain these key employees and attract other highly skilled personnel necessary to grow our business successfully, our business and results of operations could suffer.

Our future success is substantially dependent on the continued service of our executive officers, particularly our founder and chief executive officer, Dr. Valentin P. Gapontsev, and the managing director of our German subsidiary IPG Laser GmbH, Dr. Eugene Shcherbakov, our highly trained team of scientists, many of whom have numerous years of experience and specialized expertise in optical fibers, semiconductors and optical component technology, and other key engineering, sales, marketing, manufacturing and support personnel, any of whom may leave, which could harm our business. The members of our scientific staff who are expected to make significant individual contributions to our business are also members of our executive management team as disclosed under Item 10, Directors, Executive Officers and Corporate Governance below. Furthermore, our business requires scientists and engineers with experience in several disciplines, including physics, optics, materials sciences, chemistry and electronics. We will need to continue to recruit and retain highly skilled scientists and engineers for certain functions. Our future success also depends on our ability to identify, attract, hire, train, retain and motivate highly skilled research and development, managerial, operations, sales, marketing and customer service personnel. If we fail to attract, integrate and retain the necessary personnel, our ability to extend and maintain our scientific expertise and grow our business could suffer significantly.

Failure to effectively build and expand our direct field service and support organization could have an adverse effect on our business.

We believe that it will become increasingly important for us to provide rapid, responsive service directly to our customers throughout the world and to build and expand our own personnel resources to provide these services. Any actual or perceived lack of direct field service in the locations where we sell or try to sell our products may negatively impact our sales efforts and, consequently, our revenues. Accordingly, we have an

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ongoing effort to develop our direct support systems in Asia, one of our largest markets. This requires us to recruit and train additional qualified field service and support personnel as well as maintain effective and highly trained organizations that can provide service to our customers in various countries. We may not be able to attract and train additional qualified personnel to expand our direct support operations successfully. We may not be able to find and engage additional qualified third-party resources to supplement and enhance our direct support operations. Further, we may incur significant costs in providing these direct field and support services. Failure to implement our direct support operation effectively could adversely affect our relationships with our customers, and our operating results may suffer.

The laser and amplifier industries may experience declining average selling prices, which could cause our gross margins to decline and harm our operating results.

Products in the laser and amplifier industries generally, and our products specifically, have in the past and may in the future continue to experience a decline in average selling prices (ASPs) as a result of new product and technology introductions, increased competition and price pressures from significant customers. If the ASPs of our products decline and we are unable to increase our unit volumes, introduce new or enhanced products with higher margins or reduce manufacturing costs to offset anticipated decreases in the prices of our existing products, our operating results may be adversely affected. In addition, because of our significant fixed costs, we are limited in our ability to reduce total costs quickly in response to any revenue shortfalls. Because of these factors, we may experience material adverse fluctuations in our future operating results on a quarterly or annual basis if the ASPs of our products continue to decline.

A few customers account for a significant portion of our sales, and if we lose any of these customers or they significantly curtail their purchases of our products, our results of operations could be adversely affected.

We rely on a few customers for a significant portion of our sales. Our top five customers accounted for 20%, 29% and 37% of our consolidated net sales in 2007, 2006 and 2005, respectively. Our largest customer accounted for 7%, 10% and 13% of sales in 2007, 2006 and 2005, respectively. We generally do not enter into agreements with our customers obligating them to purchase our fiber lasers or amplifiers. Our business is characterized by short-term purchase orders and shipment schedules. If any of our principal customers discontinues its relationship with us, replaces us as a vendor for certain products or suffers downturns in its business, our business and results of operations could be adversely affected.

We have experienced, and expect to experience in the future, fluctuations in our quarterly operating results. These fluctuations may increase the volatility of our stock price.

We have experienced, and expect to continue to experience, fluctuations in our quarterly operating results. We believe that fluctuations in quarterly results may cause the market price of our common stock to fluctuate, perhaps substantially. Factors which may have an influence on our operating results in a particular quarter include:

- the increase, decrease, cancellation or rescheduling of significant customer orders;
- the timing of revenue recognition based on the installation or acceptance of certain products shipped to our customers;
- seasonality attributable to different purchasing patterns and levels of activity throughout the year in the areas where we operate;
- the timing of customer qualification of our products and commencement of volume sales of systems that include our products;

the rate at which our present and future customers and end users adopt our technologies;

the gain or loss of a key customer;

product or customer mix;

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competitive pricing pressures;

the relative proportions of our U.S. and international sales;

our ability to design, manufacture and introduce new products on a cost-effective and timely basis;

our ability to manage our inventory levels and any inventory write-downs;

the incurrence of expenses to develop and improve application and support capabilities, the benefits of which may not be realized until future periods, if at all;

different capital expenditure and budget cycles for our customers, which affect the timing of their spending;

foreign currency fluctuations; and

our ability to control expenses.

These factors make it difficult for us to accurately predict our operating results. In addition, our ability to accurately predict our operating results is complicated by the fact that many of our products have long sales cycles, some lasting as long as twelve months. Once a sale is made, our delivery schedule typically ranges from four weeks to four months, and therefore our sales will often reflect orders shipped in the same quarter that they are received and will not enhance our ability to predict our results for future quarters. In addition, long sales cycles may cause us to incur significant expenses without offsetting revenues since customers typically expend significant effort in evaluating, testing and qualifying our products before making a decision to purchase them. Moreover, customers may cancel or reschedule shipments, and production difficulties could delay shipments. Accordingly, our results of operations are subject to significant fluctuations from quarter to quarter, and we may not be able to accurately predict when these fluctuations will occur.

We depend on our OEM customers and system integrators and their ability to incorporate our products into their systems.

Our future growth will depend in part on our ability to maintain existing and secure new OEM customers. Our revenues also depend in part upon the ability of our current and potential OEM customers and system integrators to develop and sell systems that incorporate our laser and amplifier products. The commercial success of these systems depends to a substantial degree on the efforts of these OEM customers and system integrators to develop and market products that incorporate our technologies. Relationships and experience with traditional laser makers, limited marketing resources, reluctance to invest in research and development and other factors affecting these OEM customers and third-party system integrators could have a substantial impact upon our financial results. If OEM customers or integrators are not able to adapt existing tools or develop new systems to take advantage of the features and benefits of fiber lasers, then the opportunities to increase our revenues and profitability may be severely limited or delayed. Furthermore, if our OEM customers or third-party system integrators experience financial or other difficulties that adversely affect their operations, our financial condition or results of operations may also be adversely affected.

The markets for our products are highly competitive and increased competition could increase our costs, reduce our sales or cause us to lose market share.

The industries in which we operate are characterized by significant price and technological competition. Our fiber laser and amplifier products compete with conventional laser technologies and amplifier products offered by several well-established companies, some of which are larger and have substantially greater financial, managerial and technical resources, more extensive distribution and service networks, greater sales and marketing capacity, and larger installed customer bases than we do. Also, we compete with widely used non-laser production methods, such as resistance welding. We believe that competition will be particularly intense from makers of CO_2 and YAG lasers, as these makers of traditional solutions may lower prices to maintain current market share and have committed significant research and development resources to pursue opportunities related to these technologies.

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In addition, we face competition from a growing number of fiber laser makers. We also expect competition from established laser makers which may have started or may start programs to develop and sell fiber lasers or solid state laser technology alternatives to fiber lasers. Several established laser makers, including Rofin-Sinar Technologies Inc., Trumpf Inc., Newport Corporation, The Furukawa Electric Co., Ltd. and others, have recently introduced fiber lasers, or have announced plans to develop fiber-based lasers, that would compete with our products. Because many of the components required to develop and produce low-power fiber lasers and amplifiers are commercially available, barriers to entry are relatively low, and we expect new competitive products to be introduced. We may not be able to successfully differentiate our current and proposed products from our competitors products and current or prospective customers may not consider our products to be superior to competitors products. To maintain our competitive position, we believe that we will be required to continue a high level of investment in research and development, application development and customer service and support, and to react to market pricing conditions. We may not have sufficient resources to continue to make these investments and we may not be able to make the technological advances or price adjustments necessary to maintain our competitive position. We also compete against our OEM customers internal production of competitive laser technologies.

Our inability to manage risks associated with our international customers and operations could adversely affect our business.

Our products are currently marketed and sold in numerous countries. The United States, Germany, Japan, Russia and China are our principal markets. A significant amount of our revenues are derived from customers outside of the United States. We anticipate that foreign sales will continue to account for a significant portion of our revenues in the foreseeable future. Our operations and sales in these markets are subject to risks inherent in international business activities, including:

longer accounts receivable collection periods;

fluctuations in the values of foreign currencies;

changes in a specific country s or region s economic conditions, such as recession;

compliance with a wide variety of domestic and foreign laws and regulations and unexpected changes in those laws and regulatory requirements, including uncertainties regarding taxes, tariffs, quotas, export controls, export licenses and other trade barriers;

certification requirements;

environmental regulations;

less effective protection of intellectual property rights in some countries;

potentially adverse tax consequences;

different capital expenditure and budget cycles for our customers, which affect the timing of their spending;

political, legal and economic instability, foreign conflicts, and the impact of regional and global infectious illnesses in the countries in which we and our customers, suppliers, manufacturers and subcontractors are located;

preference for locally produced products;

difficulties and costs of staffing and managing international operations across different geographic areas and cultures;

seasonal reductions in business activities; and

fluctuations in freight rates and transportation disruptions.

Political and economic instability and changes in governmental regulations could adversely affect both our ability to effectively operate our foreign sales offices and the ability of our foreign suppliers to supply us

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with required materials or services. Any interruption or delay in the supply of our required components, products, materials or services, or our inability to obtain these components, materials, products or services from alternate sources at acceptable prices and within a reasonable amount of time, could impair our ability to meet scheduled product deliveries to our customers and could cause customers to cancel orders.

We are also subject to risks of doing business in Russia through our indirect subsidiary, NTO IRE-Polus, which provides components and test equipment to us and sells finished fiber devices to customers in Russia and neighboring countries. The results of operations, business prospects and facilities of NTO IRE-Polus are subject to the economic and political environment in Russia. In recent years Russia has undergone substantial political, economic and social change. As is typical of an emerging market, Russia does not possess a well-developed business, legal and regulatory infrastructure that would generally exist in a more mature free market economy. In addition, the tax, currency and customs legislation within Russia is subject to varying interpretations and changes, which can occur frequently. The future economic direction of Russia remains largely dependent upon the effectiveness of economic, financial and monetary measures undertaken by the government, together with tax, legal, regulatory and political developments. Our failure to manage the risks associated with NTO IRE-Polus and our other existing and potential future international business operations could have a material adverse effect upon our results of operations.

Foreign currency transaction risk may negatively affect our net sales, cost of sales and operating margins and could result in exchange losses.

We conduct our business and incur costs in the local currency of most countries in which we operate. In 2007, our net sales outside the United States represented a significant portion of our total sales. We incur currency transaction risk whenever one of our operating subsidiaries enters into either a purchase or a sales transaction using a different currency from the currency in which it receives revenues. We have entered into a foreign currency forward contract to offset our exposure to currency transaction risks primarily related to intercompany loans, receivables and payables, but we do not currently hedge against other foreign currency exchange risks. Changes in exchange rates can also affect our results of operations by changing the U.S. dollar value of sales and expenses denominated in foreign currencies. We cannot accurately predict the impact of future exchange rate fluctuations on our results of operations. Further, given the volatility of exchange rates, we may not be able to effectively manage our currency transaction or translation risks, and any volatility in currency exchange rates may increase the price of our products in local currency to our foreign customers, which may have an adverse effect on our financial condition, cash flows and profitability.

Our products could contain defects, which may reduce sales of those products, harm market acceptance of our fiber laser products or result in claims against us.

The manufacture of our fiber lasers and amplifiers involves highly complex and precise processes. Despite testing by us and our customers, errors have been found, and may be found in the future, in our products. These defects may cause us to incur significant warranty, support and repair costs, incur additional costs related to a recall, divert the attention of our engineering personnel from our product development efforts and harm our relationships with our customers. These problems could result in, among other things, loss of revenues or a delay in revenue recognition, loss of market share, harm to our reputation or a delay or loss of market acceptance of our fiber laser products. Defects, integration issues or other performance problems in our fiber laser and amplifier products could also result in personal injury or financial or other damages to our customers, which in turn could damage market acceptance of our products. Our customers could also seek damages from us for their losses. A product liability claim brought against us, even if unsuccessful, could be time-consuming and costly to defend.

We may pursue acquisitions and investments in new businesses, products, patents or technologies. These may involve risks which could disrupt our business and may harm our financial condition.

We currently have no commitments or agreements to make any acquisitions and have limited experience in making acquisitions. In the future, we may make acquisitions of and investments in new businesses, products, patents, technologies and geographic areas, or we may acquire operations, products or technologies

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that expand our current capabilities. Acquisitions present a number of potential risks and challenges that could, if not met, disrupt our business operations, increase our operating costs and reduce the value of the acquired company, asset or technology to us. For example, if we identify an acquisition candidate, we may not be able to successfully negotiate or finance the acquisition on favorable terms. Even if we are successful, we may not be able to integrate the acquired businesses, products, patents or technologies into our existing business and products. As a result of the rapid pace of technological change in our industry, we may misjudge the long-term potential of the acquired business, product, patents or technology, or the acquisition may not be complementary to our existing business. Furthermore, potential acquisitions and investments, whether or not consummated, may divert our management s attention and require considerable cash outlays at the expense of our existing operations. In addition, to complete future acquisitions, we may issue equity securities, incur debt, assume contingent liabilities or have amortization expenses and write-downs of acquired assets, which could adversely affect our profitability and result in dilution to our existing and future stockholders.

We are subject to various environmental laws and regulations that could impose substantial costs upon us and may adversely affect our business, operating results and financial condition.

Some of our operations use substances regulated under various federal, state, local and international laws governing the environment, including those relating to the storage, use, discharge, disposal, product composition and labeling of, and human exposure to, hazardous and toxic materials. We could incur costs, fines and civil or criminal sanctions, third-party property damage or personal injury claims, or could be required to incur substantial investigation or remediation costs, if we were to violate or become liable under environmental laws. Liability under environmental laws can be joint and several and without regard to comparative fault. Compliance with current or future environmental laws and regulations could restrict our ability to expand our facilities or require us to acquire additional expensive equipment, modify our manufacturing processes, or incur other significant expenses in order to remain in compliance with such laws and regulations. At this time, we do not believe the costs to maintain compliance with current environmental laws to be material. Although we do not currently anticipate that such costs will become material, if such costs were to become material in the future, whether due to unanticipated changes in environmental laws, unanticipated changes in our operations or other unanticipated changes, we may be required to dedicate additional staff or financial resources in order to maintain compliance. There can be no assurance that violations of environmental laws or regulations will not occur in the future as a result of the inability to obtain permits, human error, accident, equipment failure or other causes.

We are subject to export control regulations that could restrict our ability to increase our international sales and may adversely affect our business.

A significant part of our business involves the export of our products to other countries. The U.S. government has in place a number of laws and regulations that control the export, re-export or transfer of U.S.-origin products, software and technology. The governments of other countries in which we do business have similar regulations regarding products, software and technology originating in those countries. These laws and regulations may require that we obtain a license before we can export, re-export or transfer certain products, software or technology. The requirement to obtain a license could put us at a competitive disadvantage by restricting our ability to sell products to customers in certain countries or by giving rise to delays or expenses related to obtaining a license. In applying for a license and responding to questions from licensing authorities, we have experienced and, in the future, may experience delays in obtaining export licenses based on issues solely within the control of the applicable government agency. Under the discretion of the issuing government agency, an export license may permit the export of one unit to a single customer or multiple units to one or more customers. Licenses may also include conditions that limit the use, resale, transfer, re-export, modification, disassembly, or transfer of a product, software or technology after it is exported without first obtaining permission from the relevant government agency. Failure to comply with these laws and regulations could result in government sanctions, including substantial monetary penalties, denial of export privileges, debarment from

government contracts and a loss of revenues. Delays in obtaining or failure to obtain required export licenses also may require us to defer shipments for substantial periods or cancel orders. Any of these circumstances could adversely affect our operations and, as a result, our financial results could suffer.

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Our ability to raise capital in the future may be limited, and our failure to raise capital when needed could prevent us from growing.

We may in the future be required to raise capital through public or private financing or other arrangements. Such financing may not be available on acceptable terms, or at all, and our failure to raise capital when needed could harm our business. Additional equity financing may be dilutive to the holders of our common stock, and debt financing, if available, may involve restrictive covenants and could reduce our profitability. If we cannot raise funds on acceptable terms, we may not be able to grow our business or respond to competitive pressures.

Dr. Valentin P. Gapontsev, our chairman, Chief Executive Officer and principal stockholder, controls approximately 45% of our voting power and has a significant influence on the outcome of director elections and other matters requiring stockholder approval, including a change in corporate control.

Dr. Valentin P. Gapontsev, our Chairman and Chief Executive Officer, and IP Fibre Devices (UK) Ltd. (IPFD), of which Dr. Gapontsev is the managing director and majority owner, beneficially own approximately 45% of our common stock. In addition, Dr. Denis Gapontsev, our Vice President of Research and Development and the son of Dr. Valentin P. Gapontsev, beneficially owns approximately 4% of our common stock, and collectively with Dr. Valentin P. Gapontsev, approximately 49% of our common stock. As a result, Dr. Valentin P. Gapontsev has a significant influence on the outcome of matters requiring stockholder approval, including:

election of our directors;

amendment of our certificate of incorporation or by-laws; and

approval of mergers, consolidations or the sale of all or substantially all of our assets.

Dr. Valentin P. Gapontsev may vote his shares of our common stock in ways that are adverse to the interests of other holders of our common stock. Dr. Valentin P. Gapontsev s significant ownership interest could delay, prevent or cause a change in control of our company, any of which could adversely affect the market price of our common stock.

Dr. Valentin P. Gapontsev, our chairman, chief executive officer and principal stockholder, owns a material portion of one of our operating subsidiaries, which creates the possibility of a conflict of interest.

Although we own 58.6% of NTO IRE-Polus, our Russian subsidiary, Dr. Valentin P. Gapontsev owns 26.7%, Igor Samartsev, one of our directors, owns 4.9%, and unaffiliated third parties and certain current and former employees of NTO IRE-Polus own the remaining 9.8%. NTO IRE-Polus provides us with components and test equipment and sells finished fiber devices to customers in Russia and neighboring countries. Transactions between us and NTO IRE-Polus generated approximately $15.8 million and $12.3 million of revenues for NTO IRE-Polus for the years ended December 31, 2007 and 2006, respectively. Dr. Gapontsev s significant ownership interest in this entity creates the possibility of a conflict of interest since, by having an ownership interest in both our company and NTO IRE-Polus, his economic interests may be affected by transactions between the two entities. Under Russian law and NTO IRE-Polus s charter, supermajority or unanimous stockholder approval is required to take certain significant non-operational actions, such as amending NTO IRE-Polus s charter, electing the executive body or altering certain fundamental stockholder rights. Although we have taken steps to address possible conflicts of interests and potential issues concerning the requirement to obtain supermajority approval, these steps may not prove effective.

Anti-takeover provisions in our charter documents and Delaware law could prevent or delay a change in control of our company, even if a change in control would be beneficial to our stockholders.

Provisions of our certificate of incorporation and by-laws, including certain provisions that will take effect when Dr. Valentin P. Gapontsev (together with his affiliates and associates) ceases to beneficially own an aggregate of 25% or more of our outstanding voting securities, may discourage, delay or prevent a merger, acquisition or change of control, even if it would be beneficial to our stockholders. The existence of these

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provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock. These provisions include:

authorizing the issuance of blank check preferred stock;

establishing a classified board;

providing that directors may only be removed for cause;

prohibiting stockholder action by written consent;

limiting the persons who may call a special meeting of stockholders;

establishing advance notice requirements for nominations for election to the board of directors and for proposing matters to be submitted to a stockholder vote; and

supermajority stockholder approval to change these provisions.

Provisions of Delaware law may also discourage, delay or prevent someone from acquiring or merging with our company or obtaining control of our company. Specifically, Section 203 of the Delaware General Corporation Law, which will apply to our company following such time as Dr. Valentin P. Gapontsev (together with his affiliates and associates) ceases to beneficially own 25% or more of the total voting power of our outstanding shares, may prohibit business combinations with stockholders owning 15% or more of our outstanding voting stock.

Substantial sales of our common stock could cause our stock price to decline.

Sales of a substantial number of shares of common stock, or the perception that sales could occur, could adversely affect the market price of our common stock. As of December 31, 2007, we had 44,012,341 shares of common stock outstanding and 3,531,980 shares subject to outstanding options.

All of our unregistered shares of our common stock are now eligible for sale under Rule 144, Rule 144(k) or Rule 701. Also, the holders of an aggregate of approximately 2,240,000 shares of common stock have registration rights, including the right to require us to register the sale of their shares and the right to include their shares in public offerings that we undertake in the future. We have registered all shares of common stock that we may issue under our stock option plans. As these shares are issued, they may be freely sold in the public market, subject to the lock-up restrictions described above, and subject, in the case of any awards under our stock-based compensation plans, to applicable vesting requirements.

We incur increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies, which could adversely affect our operating results.

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company, including costs associated with public company reporting requirements. We also have incurred and will incur costs associated with recently adopted corporate governance requirements, including requirements under the Sarbanes-Oxley Act of 2002, as well as new rules implemented by the SEC and the Nasdaq Global Market. The expenses incurred by public companies generally for reporting and corporate governance purposes have been increasing. These rules and regulations have significantly increased, and are expected to continue to increase, our legal and financial compliance costs and have made some activities more time-consuming and costly. These rules and regulations have also made it more difficult and more expensive for us to obtain director and officer liability

insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors or as our executive officers.

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We are required to evaluate our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002, and any adverse results from such evaluation could result in a loss of investor confidence in our financial reports and have an adverse effect on our stock price.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we are required to furnish a report by our management on our internal control over financial reporting. Such a report is required to contain, among other matters, an assessment of the effectiveness of our internal control over financial reporting as of the end of our fiscal year, including a statement as to whether or not our internal control over financial reporting is effective. This assessment must include disclosure of any material weaknesses in our internal control over financial reporting identified by management. Our independent registered public accounting firm is also required to issue an opinion on the effectiveness of internal control over financial reporting and attest that management s assessment of the effectiveness of our internal control over financial reporting is fairly stated.

If our management identifies one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that such internal control is effective. If we are unable to assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion on the effectiveness of our internal controls or attest that our management s report is fairly stated, investors could lose confidence in the accuracy and completeness of our financial reports, which could have an adverse effect on our stock price.

We do not anticipate paying dividends on our capital stock in the foreseeable future.

We have never declared or paid any cash dividends on our capital stock and do not anticipate paying any dividends in the foreseeable future. We anticipate that we will retain any future earnings to support operations and to finance the growth and development of our business. Our payment of any future dividends will be at the discretion of our board of directors after taking into account general economic and business conditions, any contractual and legal restrictions on our payment of dividends, and our financial condition, operating results, cash needs and growth plans. In addition, current agreements with certain of our lenders contain, and future loan agreements may contain, restrictive covenants that generally prohibit us from paying cash dividends, making any distribution on any class of stock or making stock repurchases.

If securities analysts stop publishing research or reports about our business, or if they downgrade our stock, the price of our stock could decline.

The trading market for our common stock relies in part on the research and reports that industry or financial analysts publish about us. If one or more of these analysts who do cover us downgrade our stock, our stock price would likely decline. Further, if one or more of these analysts cease coverage of our company, we could lose visibility in the market, which in turn could cause our stock price to decline.

ITEM 1B. *UNRESOLVED STAFF COMMENTS*

None.

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ITEM 2. ***PROPERTIES***

Our main facilities include the following:

Location	Owned or Leased	Lease Expiration	Approximate Size (sq. ft.)	Primary Activity
Oxford, Massachusetts	Owned		170,000	Diodes, components, complete device manufacturing, administration
Burbach, Germany	Owned		163,000	Optical fiber, components, final assembly, complete device manufacturing, administration
Fryazino, Russia	Leased	March 2008(1)	61,000	Components, complete device
	Owned		7,000	manufacturing, administration
Beijing, China	Owned		38,000	Administration, service
Novi, Michigan	Owned		16,000	Administration, service
Legnano, Italy	Leased	March 2012	12,000	Complete device manufacturing, administration
Yokohama, Japan	Leased	November 2011	11,000	Administration, service

(1) We expect this lease to be renewed for an additional 11-month period upon its expiration.

We are expanding our facilities in Massachusetts, Germany and Russia by adding approximately 157,000 square feet at facilities that we own. The additional space will be used primarily for manufacturing and administration.

We maintain our corporate headquarters in Oxford, Massachusetts, and conduct research and development in Oxford, Massachusetts, Burbach, Germany and Fryazino, Russia. We operate four manufacturing facilities for lasers, amplifiers and components, which are located in the United States, Germany, Russia and Italy. We also manufacture certain optical components and systems in India and China. We are committed to meeting internationally recognized manufacturing standards. Our facilities in the United States and Germany are ISO 9001 certified and we have ISO certification in Russia for specific products. We have sales personnel at each of our manufacturing facilities, at offices in Michigan; London, England; Yokohama and Chibu, Japan; Daejeon, South Korea; Bangalore, India; and Beijing, China.

We believe that our existing facilities are adequate to meet our current needs and that we will be able to obtain additional commercial space as needed.

ITEM 3. ***LEGAL PROCEEDINGS***

From time to time, we are party to various legal proceedings and other disputes incidental to our business, including those described below. For a discussion of the risks associated with these legal proceedings and other disputes, see Item 1A. Risk Factors We Are Subject to Litigation Alleging That We Are Infringing Third-Party Intellectual Property Rights. Intellectual Property Claims Could Result in Costly Litigation and Harm Our Business.

We are a defendant in an action by IMRA America, Inc. filed in November 2006 in the United States District Court for the Eastern District of Michigan. The plaintiff alleges that certain products that we produce, including but not limited to our continuous wave and pulsed fiber lasers and fiber amplifiers, which account for a significant portion of our revenues, infringe one U.S. patent allegedly owned by IMRA America, and seeks damages in excess of $10 million, treble damages and attorneys fees for alleged willful infringement and injunctive relief. The plaintiff also alleges inducement of infringement and contributory infringement. The patent claims generally relate to an optical amplification system in which a mode converter receives an input beam with a nearly diffraction limited mode from a laser source and converts the mode to match a fundamental mode of a multi-mode fiber amplifier, which amplifier provides at an output an amplified beam

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substantially in the fundamental mode. The patent expires in June 2017. We filed an answer to the plaintiff s complaint denying infringement and raising the additional defenses that the patent is invalid and unenforceable, and we also filed declaratory judgment counterclaims based on these three defenses. We petitioned the U.S. Patent and Trademark Office to re-examine the patent based on several prior art references. The US PTO is considering our re-examination request. The case is in the discovery stage, and trial has been set for August 5, 2008. We intend to vigorously contest the claims against us, but we cannot predict the outcome of the proceeding.

We, along with eight medical laser system manufacturers, are a defendant in an action by CardioFocus Inc. filed in February 2008 in the United States District Court for the District of Massachusetts. The plaintiff alleges that our erbium and thulium fiber lasers infringe one patent allegedly owned by CardioFocus and seeks unspecified damages, treble damages and attorneys fees for alleged willful infringement. The plaintiff also alleges inducement of infringement. The patent claim generally relate to a system for transmitting laser energy via an optical fiber to a surgical site. The patent expired in April 2007. We intend to file an answer to the complaint raising several defenses. We intend to vigorously contest the claims against us, but we cannot predict the outcome of the proceeding.

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

None.

PART II

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

Price Range of Common Stock

Our common stock has been quoted on the Nasdaq Global Market under the symbol IPGP since December 13, 2006. Prior to that time, there was no public market for our common stock. The following table sets forth the quarterly high and low sale prices of our common stock as reported on the Nasdaq Global Market.

	Common Stock Price	
	High	**Low**
Fourth Quarter ended December 31, 2006 (commencing December 13, 2006)	$ 26.06	$ 21.61
First Quarter ended March 31, 2007	$ 28.00	$ 17.78
Second Quarter ended June 30, 2007	$ 23.94	$ 17.67
Third Quarter ended September 30, 2007	$ 20.41	$ 16.53
Fourth Quarter ended December 31, 2007	$ 22.34	$ 18.28

As of February 29, 2008, there were approximately 44,093,455 shares of our common stock outstanding held by approximately 150 holders of record, which does not include beneficial owners of common stock whose shares are held in the names of various securities brokers, dealers and registered clearing agencies.

Dividends

We have never declared or paid any cash dividends on our capital stock. We anticipate that we will retain any future earnings to support operations and to finance the growth and development of our business. Therefore, we do not

expect to pay cash dividends in the foreseeable future. Our payment of any future dividends will be at the discretion of our Board of Directors after taking into account any business conditions, any contractual and legal restrictions on our payment of dividends, and our financial condition, operating results, cash needs and growth plans. In addition, current agreements with certain of our lenders contain, and future loan agreements may contain, restrictive covenants that generally prohibit us from paying cash dividends, making any distribution on any class of stock or making stock repurchases.

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Recent Sales of Unregistered Securities; Use of Proceeds from Registered Securities

During the past three years, we have sold and issued the following unregistered securities:

1. In connection with our initial public offering, all outstanding shares of our series A preferred stock converted in to 359,463 shares of our common stock, all outstanding shares of our series B preferred stock converted into 7,252,927 shares of our common stock and all outstanding shares of our series D preferred stock converted into 1,683,168 shares of our common stock.

2. Since January 1, 2005, we have granted options to purchase 2,048,643 shares of our common stock at exercise prices ranging from $1.50 to $9.60 per share to employees, consultants and directors under our 2000 Incentive Compensation Plan, our 2006 Incentive Compensation Plan and our Non-Employee Directors Stock Plan. From January 1, 2005 through December 31, 2007, we have issued 1,530,296 unregistered shares of our common stock pursuant to the exercise of stock options for aggregate consideration of $2.6 million.

The sales of securities described in item (1) above were deemed to be exempt from registration pursuant to Section 4(2) of the Securities Act and Regulation D promulgated thereunder as transactions by an issuer not involving a public offering. Each of these sales was to accredited investors, as such term is defined in Rule 501 of Regulation D. Each of the recipients of securities in the transactions deemed to be exempt from registration pursuant to Section 4(2) of the Securities Act received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration or an available exemption from such registration. The issuances of the securities described in item (2) above were deemed to be exempt from registration pursuant to either Rule 701 promulgated under the Securities Act as a transaction pursuant to compensatory benefit plans approved by our board of directors or, where such recipients of securities under these compensatory plans were accredited investors because the recipients were directors or executive officers of our company, under Section 4(2) of the Securities Act as transactions by an issuer not involving a public offering. None of the sales of the securities described in items (1) and (2) above involved the use of an underwriter, and no commissions were paid in connection with the sale of any of the securities that we issued. The sales of these securities were made without general solicitation or advertising.

Issuer Purchases of Equity Securities

During the quarter ended December 31, 2007, there were no repurchases made by us or on our behalf, or by any affiliated purchasers, of shares of our common stock.

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Information Regarding Equity Compensation Plans

The following table sets forth information with respect to securities authorized for issuance under our equity compensation plans as of December 31, 2007:

Equity Compensation Plan Information

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity Compensation Plans Approved by Security Holders	3,498,646	$ 4.23	2,878,913
Equity Compensation Plans Not Approved by Security Holders	33,334	$ 1.50	
Total	3,531,980		2,878,913

The equity compensation plan not approved by security holders includes a non-plan grant of stock options by the Board of Directors in March 2000 to a non-employee advisor. The stock options were non-qualified stock options to purchase common stock at an exercise price of $1.50 per share. These options vested immediately and expire in March 2010.

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ITEM 6. ***SELECTED FINANCIAL DATA***

The following selected consolidated financial data should be read in conjunction with, and is qualified by reference to, our consolidated financial statements and related notes and Item 7, Management s Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this Annual Report on Form 10-K. The data as of December 31, 2007 and 2006, and for the years ended December 31, 2007, 2006 and 2005, is derived from our audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. The data as of December 31, 2005, 2004 and 2003, and for the years ended December 31, 2004 and 2003, is derived from our audited consolidated financial statements and related notes not included in this Annual Report on Form 10-K. Effective January 1, 2006, we were required to begin accounting for stock-based payments at fair value, as discussed in note 2 to the consolidated financial statements. Our historical results are not necessarily indicative of the results for any future period.

	Year Ended December 31,				
	2007	2006	2005	2004	2003
	(In thousands, except per share data)				
Consolidated Statement of Operations Data:(1)					
Net sales	$ 188,677	$ 143,225	$ 96,385	$ 60,707	$ 33,740
Cost of sales	103,695	79,931	62,481	42,274	38,583
Gross profit (loss)	84,982	63,294	33,904	18,433	(4,843)
Operating expenses:					
Sales and marketing	10,103	6,222	3,236	2,363	2,110
Research and development	9,527	6,544	5,788	4,831	10,063
General and administrative	19,028	14,522	10,598	8,179	9,998
Total operating expenses	38,658	27,288	19,622	15,373	22,171
Operating income (loss)	46,324	36,006	14,282	3,060	(27,014)
Interest income (expense), net	674	(1,493)	(1,840)	(2,150)	(1,505)
Fair value adjustment to series B warrants(2)		(7,444)	(745)	(615)	(3,664)
Other income, net	612	1,050	236	196	1,647
Net income (loss) before (provision for) benefit from income taxes and minority interests in consolidated subsidiaries	47,610	28,119	11,933	491	(30,536)
(Provision for) benefit from income taxes	(15,522)	2,995	(4,080)	1,601	2,205
Minority interests in consolidated subsidiaries	(2,193)	(1,881)	(426)	(80)	121
Net income (loss)	29,895	29,233	7,427	2,012	(28,210)
Accretion of series B preferred stock		(1,994)	(2,351)	(2,351)	(2,351)

Beneficial conversion feature			(18,267)		(5,242)
Net income (loss) applicable to common stockholders	$ 29,895	$ 8,972	$ 5,076	$ (339)	$ (35,803)
Net income (loss) per share:					
Basic	$ 0.69	$ 0.27	$ 0.16	$ (0.01)	$ (1.40)
Diluted	$ 0.65	$ 0.26	$ 0.16	$ (0.01)	$ (1.40)
Weighted-average shares outstanding:					
Basic	43,269	27,896	26,232	25,698	25,534
Diluted	45,749	33,005	30,167	25,698	25,534

(1) Due primarily to certain stock-based compensation awarded primarily in 2000 and 2001, we have recorded significant stock-based compensation during the year ended December 31, 2003. Those awards became fully vested during the year ended December 31, 2004. See Item 7, Management s Discussion and

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Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates Stock-Based Compensation.

(2) The change in value of the series B warrants is a non-cash charge related to recording the increase or decrease in the fair value of the warrants prior to their conversion in December 2006. The change in fair value for this derivative instrument was directly related to the probability that the warrants would be exercised prior to their expiration in April 2008. We used a portion of the net proceeds from our IPO to repurchase the series B warrants. See Item 7, Management s Discussion and Analysis of Financial Condition and Results of Operations Factors and Trends That Affect our Operations and Financial Results Effect of Preferred Stock On Net Income and Net Income Per Share.

	As of December 31,				
	2007	2006	2005	2004	2003
			(In thousands)		
Consolidated Balance Sheet Data:					
Cash and cash equivalents	$ 37,972	$ 75,667	$ 8,361	$ 2,548	$ 536
Working capital	121,209	115,668	21,487	20,934	16,303
Total assets	263,321	232,492	115,481	110,545	105,481
Long-term debt, including current portion and a provision for contract settlement	20,000	38,367	26,081	31,454	34,268
Series B warrants			14,644	13,899	13,284
Convertible redeemable preferred stock			96,348	93,997	91,646
Preferred stock			4,880	4,880	5,000
Stockholders equity (deficit)	200,180	158,594	(46,504)	(49,038)	(51,947)

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with Item 6, Selected Consolidated Financial Data and our consolidated financial statements and related notes included in this Annual Report of Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors including, but not limited to, those discussed under Item 1A, Risk Factors.

Overview

We develop and manufacture a broad line of high-performance fiber lasers for diverse applications in numerous markets. Fiber lasers are a new generation of lasers that combine the advantages of semiconductor diodes, such as long life and high efficiency, with the high amplification and precise beam qualities of specialty optical fibers to deliver superior performance, reliability and usability at a generally lower total cost of ownership compared to conventional CO_2 and crystal lasers. Our products are displacing traditional lasers in many current applications and enabling new applications for lasers.

Our diverse lines of low, mid and high-power lasers and amplifiers are used in materials processing, advanced, communications and medical applications. We sell our products globally to original equipment manufacturers, or OEMs, system integrators and end users. We market our products internationally primarily through our direct sales force and also through agreements with independent sales representatives and distributors. We have sales offices in

the United States, Germany, Italy, the United Kingdom, Japan, China, South Korea, India and Russia.

We are vertically integrated such that we design and manufacture all key components used in our finished products, from semiconductor diodes to optical fiber preforms, finished fiber lasers and amplifiers. Our

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vertically integrated operations allow us to reduce manufacturing costs, ensure access to critical components and rapidly develop and integrate advanced products while protecting our proprietary technology.

Since our formation in 1990 in Russia, we have been focused on developing and manufacturing high-power fiber lasers and amplifiers. We established manufacturing and research operations in Germany in 1994 and in the United States in 1998. In the following years, we developed numerous OEM customer relationships for our advanced, active fiber-based products and generated a substantial majority of our sales from communications companies. Despite the significant economic downturn in the communications industry during 2001 and 2002, we invested in developing and manufacturing our own semiconductor diodes, one of our highest-cost components, rather than purchasing them from third-party vendors. Also, we developed new products with higher output levels, targeting new applications and markets outside of the communications industry, particularly materials processing.

In December 2006, we completed our IPO of 10,350,000 shares of common stock at $16.50 per share, comprised of 6,241,379 primary shares and 4,108,621 shares offered by selling stockholders. In connection with the IPO, all of the outstanding shares of our preferred stock were converted into an aggregate of 9,295,558 shares of common stock.

Description of Our Net Sales, Costs and Expenses

Net sales. We derive net sales primarily from the sale of fiber lasers and amplifiers. We also sell diode lasers, communications systems and complementary products. We develop our products to standard specifications and use a common set of components within our product architectures. We sell our products through our direct sales organization and our network of distributors and sales representatives, as well as system integrators. We sell our products to OEMs that supply materials processing laser systems, communications systems and medical laser systems to end users. We also sell our products to end users that build their own systems which incorporate our products or use our products as an energy or light source. Sales of our products generally are recognized upon shipment, provided that no obligations remain and collection of the receivable is reasonably assured.

Our sales cycle varies substantially, ranging from a period of a few weeks to as long as one year or more. Our scientists and engineers work closely with OEMs and end users to analyze their system requirements and select and meet appropriate specifications. Our major products are based upon a common technology platform. We continually enhance these and other products by improving their components as well as by developing new components. Although it is difficult to predict the life cycles of our products and what stage of the life cycle our products are in, we estimate that our major products are in the early stages of their life cycles. Our sales typically are made on a purchase order basis rather than through long-term purchase commitments.

The average selling prices of our products generally decrease as the products mature. These decreases result from factors such as increased competition, the introduction of new products, increases in unit volumes and market share considerations. In the past, we have lowered our selling prices in order to penetrate new markets and applications in which previously it was not economically feasible for customers to deploy our products. Furthermore, we offer volume discounts to customers who buy multiple units. We cannot predict the timing and degree of these price declines.

Cost of sales. Our cost of sales consists primarily of the cost of raw materials and components, direct labor expenses and manufacturing overhead. We are vertically integrated and currently manufacture all critical components for our products as well as assemble finished products. We believe our vertical integration allows us to increase efficiencies, leverage our scale and lower our cost of sales. Cost of sales also includes personnel costs and overhead related to our manufacturing and engineering operations, related occupancy and equipment costs, shipping costs and reserves for inventory obsolescence and for warranty obligations. Inventories are written off and charged to cost of sales when identified as excess or obsolete.

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Due to our vertical integration strategy, we maintain a relatively high fixed manufacturing overhead. We cannot adjust these fixed costs quickly to adapt to rapidly changing market conditions. Our gross profit, in absolute dollars and as a percentage of net sales, is greatly impacted by our sales volume and the corresponding absorption of fixed manufacturing overhead expenses. Additionally, because many of our products are customized, we are frequently required to devote significant engineering resources to the sales process, which we also include in cost of product sales as incurred.

Sales and marketing. Our sales and marketing expense consists primarily of compensation, costs of advertising, trade shows, professional and technical conferences, promotions, travel related to our sales and marketing operations, related occupancy and equipment costs and other marketing costs.

Research and development. Our research and development expense consists primarily of compensation, test and development expenses related to the design of our products and certain components, and facilities costs. We use a common research and development platform for our products. Costs related to product development are recorded as research and development expenses in the period in which they are incurred.

General and administrative. Our general and administrative expense consists primarily of compensation and associated costs for executive management, finance and other administrative personnel, outside professional fees, allocated facilities costs and other corporate expenses.

Fair value adjustment to series B warrants. In connection with the issuance of our series B preferred stock in 2000, we issued warrants to purchase shares of our common stock. In December 2006, we repurchased the series B warrants with a portion of the proceeds from our IPO. The fair value adjustment to our series B warrants was a non-cash benefit or expense relating to a change in the fair value of the warrants. These warrants were accounted for as a derivative and were exercisable only after an initial public offering, a merger or liquidation or the sale of a majority of our common stock. A change in the fair value of the warrants was based on a change in the probability of any of such events occurring prior to the expiration of the warrants. We incurred a non-cash benefit or expense each quarter based upon the increase or decrease, respectively, in the fair value of the warrants until such warrants were repurchased. Following the IPO, we recorded no further adjustments to the fair value of these warrants in our financial statements because they were repurchased.

Minority interests in consolidated subsidiaries. Our financial statements consolidate the financial results of our subsidiaries, including the subsidiaries that are not wholly owned by us. We own all of the stock of our subsidiaries, except for 20% of our Italian subsidiary, IPG Fibertech S.r.l., 41.4% of our Russian subsidiary, NTO IRE-Polus, 20% of our Japanese subsidiary, IPG Photonics (Japan) Ltd. (IPG Japan), and 10% of our South Korean subsidiary, IPG Photonics (Korea) Ltd. We reduce or increase our net income by the net income or loss, respectively, attributable to the minority ownership interest in such subsidiaries. In the event that any losses attributable to the minority stockholders of these subsidiaries exceed the minority interest in the equity capital of the subsidiaries, we recognize the amount of such excess and any further losses attributable to the minority stockholders in full in our consolidated statements of operations because either the minority stockholders do not have the ability to absorb such losses or they are not obligated to do so. Such excess losses historically have not been significant and we do not expect them to be significant in future periods.

Factors and Trends That Affect Our Operations and Financial Results

In reading our financial statements, you should be aware of the following factors and trends that our management believes are important in understanding our financial performance.

Net sales. From 2003 to 2007, our net sales grew from $33.7 million to $188.7 million, representing a compound annual growth rate of approximately 54%. The principal drivers of our net sales growth have been (i) introduction of new products, including our high-power lasers, and increasing demand for our products, fueled by the decreasing average cost per watt of output power, (ii) the expansion of our product line into higher output power levels, (iii) the growing market acceptance of fiber lasers, and (iv) the development of new applications for our products and new OEM customer relationships. While we believe we have multiple opportunities for additional net sales growth, we do not expect our net sales percentage growth rates to

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continue to be as high as those we have historically experienced. Our annual revenue growth rates have decreased from 80% in 2004 to 59% in 2005, 49% in 2006 and 32% in 2007. We experienced periods of rapid growth from 1998 to 2000 and from 2002 to the present, as well as a period when net sales decreased in 2001 and 2002 following the decline in the communications market. Since 2002, we have diversified our end markets and reduced our reliance on any particular industry.

In planning our business, we take into account the cyclical nature of some of the end markets that we serve, as well as the longer-term historical patterns in the development of our business. For example, our net sales growth from materials processing applications could slow if there is a decline in investment in machinery and equipment used in manufacturing. Net sales derived from communications sales were adversely affected following the increase in inventory levels of communications devices in 2000 and 2001.

Our net sales have historically fluctuated from quarter to quarter. The increase or decrease in sales from a prior quarter can be affected by the timing of orders received from customers, the shipment, installation and acceptance of products at our customers facilities, the mix of OEM orders and one-time orders for products with large purchase prices, and seasonal factors such as the purchasing patterns and levels of activity throughout the year in the regions where we operate. Historically, our net sales have been higher in the second half of the year than in the first half of the year. Furthermore, net sales can be affected by the time taken to qualify our products for use in new applications in the end markets that we serve. The adoption of our products by a new customer or qualification in a new application can lead to an increase in net sales for a period, which may then slow until we further penetrate new markets or obtain new customers.

Gross margin. One of our important objectives is maintaining and improving our gross margin, which is our gross profit expressed as a percentage of our net sales. In the last three years our gross margins have increased from 35.2% in 2005 to 44.2% in 2006 and 45.0% in 2007.

Our total gross margin in any period can be affected by total net sales in any period, product mix, that is, the percentage of our revenue in that period that is attributable to higher or lower-power products, and by other factors, some of which are not under our control. Our product mix affects our margins because the selling price per watt is higher for low and mid-power devices than for high-power devices. The overall cost of high-power lasers may be partially offset by improved absorption of fixed overhead costs associated with sales of larger volumes of higher-power products.

Due to the fact that we have high fixed costs, our costs are difficult to adjust in response to changes in demand. In addition, our fixed costs will increase as we expand our capacity. Gross margins generally have improved because of greater absorption of fixed overhead costs associated with sales of larger volumes of higher-power products. However, if the rate at which our fixed costs increases is greater than the growth rate of our net sales or if we have production issues or inventory write-downs, our gross margins could be negatively affected. The improvement in gross margin in 2007 was lower than that achieved between 2003 and 2006 due to significant investment in capacity expansion and absorption of fixed costs that was substantially the same in 2007 as 2006 and lower diode yields and which, in part, negatively affected the fourth quarter of 2007.

Therefore, our manufacturing costs as a percentage of net sales are volatile and can increase or decrease depending on total net sales and sales mix in a period. For example, gross margins were 46.3%, 46.2%, 45.3% and 42.9%, respectively, for the three months ended March 31, 2007, June 30, 2007, September 30, 2007 and December 31, 2007.

We also regularly review our inventory for items that are slow moving, have been rendered obsolete or determined to be excess, and any write-off of such slow moving, obsolete or excess inventory affects our gross margins.

The factors that can influence the gross margins derived from sales of any individual product include the following:

- factors that affect the prices we can charge, including the features and performance of our products, their output power, the nature of the end user and application, and competitive pressures;

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factors that affect the cost of our net sales, including the cost of raw materials and components, manufacturing costs and shipping costs;

production volumes and yields of specific product lines or components; and

in the case of our OEM customers, the type of market that they serve and the competitive pricing pressures faced by our OEM customers.

While we believe that we have opportunities to improve our gross margins, we do not expect improvements in our gross margins to continue to be as high as those we have historically experienced. Also, gross margins could be negatively affected by our capacity expansion.

Cost of diodes. Prior to 2004, we used semiconductor diodes purchased from a third-party supplier. In 2004, we began production at our semiconductor diode manufacturing facility, which enabled us to significantly reduce the cost of our semiconductor diodes and eliminate reliance upon suppliers for this component. For many of our products, particularly at higher power levels, the cost of diodes is the most important factor in determining the price of the product. In addition, we have increased the output power of an individual semiconductor diode, further reducing our cost per watt. We do not anticipate that any further reductions in the cost of diodes will be as significant as we have experienced in the past.

Sales and marketing expense. We expect to continue to expand our worldwide direct sales organization, build and expand applications centers, hire additional personnel involved in marketing in our existing and new geographic locations, increase the number of units used for demonstration purposes, and otherwise increase expenditures on sales and marketing activities in order to support the growth in our net sales. As such, we expect that our sales and marketing expenses will increase in the aggregate.

Research and development expense. We plan to continue to invest in research and development to improve our existing components and products and develop new components and products. We plan to increase the personnel involved in research and development and expect to increase other research and development expenses. As such, we expect that our research and development expenses will increase in the aggregate.

General and administrative expense. We expect our general and administrative expenses to continue to increase as we expand headcount to support the growth of our company, comply with public company reporting obligations and regulatory requirements, incur higher insurance expenses related to directors and officers insurance and continue to invest in our financial reporting systems. We expect future increases in these expenses to be more moderate than those that we experienced in 2007. Legal expenses are expected to increase in response to pending litigation and may increase in response to any future litigation or intellectual property matters, the timing and amount of which may vary substantially from quarter to quarter.

Major customers. We have historically depended on a few customers for a large percentage of our annual net sales. The composition of this group can change from year to year. Net sales derived from our five largest customers as a percentage of our annual net sales were 37% in 2005, 29% in 2006 and 20% in 2007. Sales to our largest customer accounted for 13%, 10% and 7% of our net sales in 2005, 2006 and 2007, respectively. We seek to add new customers and to expand our relationships with existing customers. We anticipate that the composition of our net sales to our significant customers will continue to change. If any of our significant customers were to substantially reduce their purchases from us, our results would be adversely affected.

Effect of preferred stock on net income and net income per share. Our net income per share computations historically have been impacted by our convertible preferred stock, convertible debt and the series B warrants which were outstanding prior to our IPO in December 2006. We no longer have any such convertible debt or equity instruments outstanding. As such, our net income per share computations will no longer be adjusted for the effects of these convertible instruments for the periods following the completion of the IPO in December 2006.

In connection with the issuance of our series B preferred stock, we issued warrants (the series B warrants) to purchase, in the aggregate, shares of our common stock valued at $47.5 million at an equivalent per-share

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price of 50% of the fair value on the date of an initial public offering of common stock or the sale, merger or liquidation of our company. The series B warrants constituted freestanding derivatives that were accounted for as liabilities at fair value and the changes in fair value of the series B warrants were recorded as non-cash expenses or benefits. Any increase in the fair value of the series B warrants had the effect of reducing our reported net income and net income per share. For the years ended December 31, 2006 and 2005, the fair value of the series B warrants increased by $7.4 million and $0.7 million, respectively. We repurchased the series B warrants in December 2006 and we recorded incremental expense associated with the series B warrants totaling approximately $3.1 million, representing the increase in fair value from the carrying value on the most recent measurement date to the $22.1 million repurchase value. In subsequent quarters, we have not recognized and will not recognize any further income or expense with respect to the series B warrants.

The terms of our series A preferred stock and series B preferred stock included price protection or anti-dilution features that constituted a contingent beneficial conversion feature (or deemed dividend) that were recorded upon the resolution of the contingency, the completion of our IPO. The deemed dividend did not reduce net income but did reduce net income applicable to common stockholders in the computation of net income (loss) per share. We recorded a deemed dividend totaling approximately $18.3 million in the quarter ended December 31, 2006, the quarter in which our IPO occurred. No further deemed dividends associated with the beneficial conversion features related to our series A preferred stock or series B preferred stock will be required in subsequent quarters as all outstanding shares of our series A preferred stock and series B preferred stock converted into shares of our common stock upon completion of our IPO.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of net sales and expenses. By their nature, these estimates and judgments are subject to an inherent degree of uncertainty. On an ongoing basis we re-evaluate our judgments and estimates including those related to inventories, income taxes and the fair value of certain debt and equity instruments including stock-based compensation. We base our estimates and judgments on our historical experience and on other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making the judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates, which may result in material effects on our operating results and financial position. The accounting policies described below are those which, in our opinion, involve the most significant application of judgment, or involve complex estimation, and which could, if different judgments or estimates were made, materially affect our reported results of operations and financial position.

Revenue recognition. Our net sales are generated from sales of fiber lasers, fiber amplifiers, diode lasers and complementary products. Our products are used in a wide range of applications by different types of end users or used as components or integrated into systems by OEMs or system integrators, and are often used as sub-assemblies required for end products manufactured by or for the customer. We also sell communications systems that include our fiber lasers and amplifiers as components.

We recognize revenue in accordance with SEC Staff Accounting Bulletin, or SAB, No. 104, Revenue Recognition. SAB No. 104 requires that four basic criteria be met before revenue can be recognized: (i) persuasive evidence of an arrangement exists; (ii) delivery has occurred or services have been rendered; (iii) the fee is fixed or determinable; and (iv) collectibility is reasonably assured. Revenue from the sale of our products is generally recognized upon shipment, provided that the other revenue recognition criteria have been met. We have no obligation to provide upgrades, enhancements or customer support subsequent to the sale, other than warranty.

Revenue from orders with multiple deliverables is divided into separate units of accounting when certain criteria are met. The consideration for the arrangement is then allocated to the separate units of accounting based on their relative fair values. We defer the revenue on multiple element arrangements if the fair values of

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all deliverables are not known or if customer acceptance is contingent on delivery of specified items or performance conditions, if the performance conditions cannot be satisfactorily tested prior to shipment or if the Company has not met such conditions in the past. Applicable revenue recognition criteria are then applied separately to each separate unit of accounting.

Returns and customer credits are infrequent and are recorded as a reduction to revenue. Rights of return are generally not included in sales arrangements. Generally, we receive a customer purchase order as evidence of an arrangement and product shipment terms are free on board (F.O.B.) shipping point. Periodically, our revenue arrangements include customer acceptance clauses. Revenue is deferred until customer acceptance has been obtained.

Inventory. Inventory is stated at the lower of cost (first-in, first-out method) or market. Inventory includes parts and components that may be specialized in nature and subject to rapid obsolescence. We maintain a reserve for inventory items to provide for an estimated amount of excess or obsolete inventory. The reserve is based upon a review of inventory materials on hand, which we compare with estimated future usage. In addition, we review the inventory and compare recorded costs with estimates of current market value. Write-downs are recorded to reduce the carrying value to the net realizable value with respect to any part with costs in excess of current market value. Estimating demand and current market values is inherently difficult, particularly given that we make unique components and products. We determine the valuation of excess and obsolete inventory by making our best estimate considering the current quantities of inventory on hand and our forecast of the need for this inventory to support future sales of our products. We often have limited information on which to base our forecasts. If future sales differ from these forecasts, the valuation of excess and obsolete inventory may change. In addition, we recorded inventory changes of $2.5 million, $1.0 million and $1.9 million in 2007, 2006 and 2005, respectively.

Stock-based compensation. Prior to January 1, 2006, we accounted for stock-based employee compensation arrangements in accordance with the intrinsic value provisions of Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees (APB 25). Therefore, we did not record any compensation expense for stock options we granted to our employees where the exercise price was at least equal to the fair value of the stock on the date of grant. Stock-based compensation is included in the following financial statement captions as follows:

	Year Ended December 31,		
	2007	2006	2005
	(In thousands)		
Cost of sales	$ 285	$ 127	$ 4
Sales and marketing	113	62	1
Research and development	237	43	1
General and administrative	689	301	1
Total	$ 1,324	$ 533	$ 7

Prior to the adoption of SFAS No. 123(R), *Share-Based Payment* (SFAS No. 123(R)), by the Financial Accounting Standards Board (FASB), we complied with the disclosure requirements of SFAS No. 123 and SFAS No. 148, which required that we disclose our pro forma net income or loss and net income or loss per common share as if we had expensed the options at fair value. As a private company, we applied the provisions of SFAS No. 123 using the minimum value computations, which assume no volatility in the fair value of our common stock underlying employee stock options. In December 2004, SFAS No. 123 was amended (now referred to as SFAS No. 123(R)) and we account for any newly issued, modified or settled stock awards on or after January 1, 2006 at fair value.

We adopted SFAS No. 123(R) using the prospective transition method. Under this method, compensation costs recorded during 2006 and 2007 include: (i) compensation costs for all share-based payment awards granted prior to, but not yet vested as of, January 1, 2006, based on the intrinsic value in accordance with the original provisions of APB 25; and (ii) compensation costs for all share-based payment awards granted subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions

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of SFAS No. 123(R). We allocate and record stock-based compensation expense on a straight-line basis over the requisite service period.

Under SFAS No. 123(R), we calculate the fair value of stock option grants using the Black-Scholes option pricing model. Determining the appropriate fair value model and calculating the fair value of stock-based payment awards require the use of highly subjective assumptions, including the expected life of the stock-based payment awards and stock price volatility. The assumptions used in calculating the fair value of stock-based payment awards represent management s best estimates, but the estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future. The weighted average assumptions used in the Black-Scholes model were 6.25 years for the expected term, 65% for the expected volatility, and 0% for dividend yield for the years ended December 31, 2007 and 2006. The weighted average risk-free rate was 4.51% and 4.75% for the years ended December 31, 2007 and 2006, respectively.

Because there was not a sufficient trading history in the public market for our common stock, we are unable to use actual price volatility or option life as input assumptions within our Black-Scholes valuation model.

The weighted average expected option term for 2006 and 2007 reflects the application of the simplified method set forth in SAB No. 107, *Share-Based Payment*. The simplified method defines the life as the average of the contractual term of the options and the weighted average vesting period for all option tranches.

Because there was not a sufficient trading history in the public market for our common stock, the fair value of our common stock was determined by our board of directors based on consideration of relevant factors. Factors considered by our board of directors included:

- independent valuation reports that we received;
- the agreed-upon consideration paid in arms-length transactions in the form of convertible preferred stock and common stock;
- the superior rights and preferences of securities senior to our common stock at the time of each grant;
- historical and anticipated fluctuations in our net sales and results of operations, which reflect our dependence on certain key customers, the cyclical nature of certain of our end markets and market acceptance of our products; and
- the risks of owning our common stock and its non-liquid nature.

For the calculation of expected volatility, because there was not a sufficient trading history in the public market for our common stock and therefore we lacked company-specific historical and implied volatility information, we based our estimate of expected volatility on the expected volatility of similar entities whose share prices are publicly available. We used the following factors to identify similar public entities: industry, stage of life cycle, size and profitability. We intend to continue to consistently apply this process using the same or similar entities until a sufficient amount of historical information regarding the volatility of our own share price becomes available, or unless circumstances change such that the identified entities are no longer similar to us. In this latter case, more suitable, similar entities whose share prices are publicly available would be utilized in the calculation.

As stock-based compensation expense recorded in our statements of operations for the years ended December 31, 2006 and 2007, is based on options ultimately expected to vest, it has been reduced for estimated forfeitures.

SFAS No. 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The stock-based compensation recorded for the years ended December 31, 2006 and 2007, reflects an estimated forfeiture rate of 5%. For purposes of preparing the pro forma information required under SFAS No. 123 for the periods prior to 2006, we accounted for forfeitures as they occurred.

In accordance with the prospective transition method, our financial statements for prior periods have not been restated to reflect, and do not include, the impact of SFAS No. 123(R). Total employee stock-based

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compensation expense recorded under SFAS No. 123(R) for the year ended December 31, 2007 was $1.3 million. We expect that our stock-based compensation expense will increase in future periods.

Income taxes. We account for income taxes under the provisions of SFAS No. 109, Accounting for Income Taxes. Under this method, we determine the deferred tax assets and liabilities based upon the difference between the financial statements and the tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. The tax consequences of most events recognized in the current year s financial statements are included in determining income taxes currently payable. However, because tax laws and financial accounting standards differ in their recognition and measurement of assets, liabilities, equity, net sales, expenses, gains and losses, differences arise between the amount of taxable income and pretax financial income for a year and the tax basis of assets or liabilities and their reported amounts in the financial statements. Because we assume that the reported amounts of assets and liabilities will be recovered and settled, respectively, a difference between the tax basis of an asset or a liability and its reported amount in the balance sheet will result in a taxable or a deductible amount in some future years when the related assets or liabilities are settled or the reported amount of the assets are recovered, giving rise to a deferred tax asset or liability. We must then periodically assess the likelihood that our deferred tax assets will be recovered from our future taxable income, and, to the extent we believe that it is more likely than not our deferred tax assets will not be recovered, we must establish a valuation allowance against our deferred tax assets.

We have used our net operating losses in Germany that we have previously generated and we are now paying income taxes in Germany. In 2006, our valuation allowances related to deferred tax assets were reduced by $17.7 million. The reduction included $4.6 million related to operating losses used and timing differences that were reversed during the year and $13.1 million of valuation allowances released in the fourth quarter of 2006 after we determined that the underlying deferred tax assets primarily consisting of U.S. Federal operating loss carryforwards were more likely than not to be realized. As of December 31, 2007, the remaining valuation allowances were $0.3 million, primarily provided against U.S. state net operating loss carryforwards. The release of the remaining valuation allowance will depend upon the continued improvement in results of our U.S. operations.

We adopted Financial Accounting Standards Board Interpretation No. 48 *Accounting for Uncertainty in Income Taxes* (FIN 48), in 2007. FIN 48 prescribes a recognition threshold and measurement process for recording in the financial statements uncertain tax positions taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures and transitions. The effect of adoption on our results of operations and financial condition as of and for the year ended December 31, 2007 was not material. As of December 31, 2007, we had $865,000 of unrecognized tax benefits. If recognized, all of our unrecognized tax benefits would be recorded as a component of income tax expense. Estimated penalties and interest related to the underpayment of income taxes are $179,000 for the year ended December 31, 2007 and are included as a component of the provision for income taxes.

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Results of Operations

The following table sets forth selected statement of operations data for the periods indicated in dollar amounts and expressed as a percentage of net sales.

	Year Ended December 31,					
	2007		2006		2005	
	(In thousands, except percentages)					
Net sales	$ 188,677	100.0%	$ 143,225	100.0%	$ 96,385	100.0%
Cost of sales	103,695	55.0	79,931	55.8	62,481	64.8
Gross profit	84,982	45.0	63,294	44.2	33,904	35.2
Operating expenses:						
Sales and marketing	10,103	5.4	6,222	4.4	3,236	3.4
Research and development	9,527	5.0	6,544	4.6	5,788	6.0
General and administrative	19,028	10.1	14,522	10.1	10,598	11.0
Total operating expenses	38,658	20.5	27,288	19.1	19,622	20.4
Operating income	46,324	24.5	36,006	25.1	14,282	14.8
Interest income (expense), net	674	0.4	(1,493)	(1.0)	(1,840)	(1.9)
Fair value adjustment to series B warrants			(7,444)	(5.2)	(745)	(0.8)
Other income, net	612	0.3	1,050	0.7	236	0.2
Net income before (provision for) benefit from income taxes and minority interests in consolidated subsidiaries	47,610	25.2	28,119	19.6	11,933	12.3
(Provision for) benefit from income taxes	(15,522)	(8.2)	2,995	2.1	(4,080)	(4.2)
Minority interests in consolidated subsidiaries	(2,193)	(1.2)	(1,881)	(1.3)	(426)	(0.4)
Net income	29,895	15.8	29,233	20.4	7,427	7.7
Accretion of series B preferred stock			(1,994)	(1.4)	(2,351)	(2.4)
Beneficial conversion feature			(18,267)	(12.7)		
Net income applicable to common stockholders	$ 29,895	15.8%	$ 8,972	6.3%	$ 5,076	5.3%
Net income per share:						
Basic	$ 0.69		$ 0.27		$ 0.16	

Diluted	$ 0.65	$ 0.26	$ 0.16
Weighted-average shares outstanding:			
Basic	43,269	27,896	26,232
Diluted	45,749	33,005	30,167

Comparison of Year Ended December 31, 2007 to Year Ended December 31, 2006

Net sales. Net sales increased by $45.5 million, or 31.8%, to $188.7 million in 2007 from $143.2 million in 2006. This increase was attributable to higher sales of fiber lasers in materials processing applications, where net sales increased by $42.4 million, or 43.5%, and advanced applications, where net sales increased by $5.8 million, or 30.3%. These increases were partially offset by a decrease in sales in communications applications of $2.2 million, or 14.2%, and medical applications of $0.7 million, or 5.9%. The growth in materials processing sales resulted primarily from increased market penetration for high-power fiber lasers as well as an increase in sales of pulsed and medium-power fiber lasers. The decrease in communications applications sales was due to lower sales of fiber amplifiers to our largest U.S. telecom customer due to

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increased competition experienced by our customer as well as completion of a project with a customer in Asia. This decrease was partially offset by increased sales of telecommunications systems in Russia. The slight decrease in sales of medical applications was due to lower sales to our largest customer for this application.

Cost of sales and gross margin. Cost of sales increased by $23.8 million, or 29.8%, to $103.7 million in 2007 from $79.9 million in 2006, as a result of increased sales volume. Our gross margin increased to 45.0% in 2007 from 44.2% in 2006. The increase in gross margin was the result of slightly more favorable absorption of our fixed manufacturing costs in 2007 due to higher production volumes, which was reduced by higher expenses related to continued expansion of our vertically integrated manufacturing capacity. These higher expenses related to manufacturing salaries and benefits, facilities, supplies and tooling and depreciation. A higher proportion of high-power sales and a lower proportion of amplifier sales in 2007 as compared to 2006 and lower diode yields late in 2007 also affected gross margins in 2007. High-power lasers tend to have a lower selling price per watt of output and lower contribution margins than amplifiers, low-power lasers and pulsed lasers.

Sales and marketing expense. Sales and marketing expense increased by $3.9 million, or 62.9%, to $10.1 million in 2007 from $6.2 million in 2006, primarily as a result of an increase of $1.5 million in selling expenses related to an increase in the number of units used for demonstration purposes and an increase of $1.2 million in personnel costs related to the expansion of our worldwide direct sales organization, including our new sales and service center in China. The remainder of the increase related to increases in costs for trade fairs, travel, premises and depreciation. As a percentage of sales, sales and marketing expense increased to 5.4% in 2007 from 4.4% in 2006. As we continue to expand our sales presence and organization worldwide we expect expenditures on sales and marketing to continue to increase.

Research and development expense. Research and development expense increased by $3.0 million, or 46.2%, to $9.5 million in 2007 from $6.5 million in 2006. This increase was primarily due to an increase of $2.0 million in personnel costs and $0.5 million in consulting costs to support increased research and development activity. Research and development activity continues to focus on enhancing the performance of our internally manufactured components, refining production processes to improve manufacturing yields and the development of new products operating at different wavelengths and at higher output powers. As a percentage of sales, research and development expense increased to 5.0% in 2007 from 4.6% in 2006.

General and administrative expense. General and administrative expense increased by $4.5 million, or 31.0%, to $19.0 million in 2007 from $14.5 million in 2006, primarily due to an increase of $2.3 million in personnel expenses as we expanded the general and administrative function to support the growth of the business and comply with the reporting and regulatory requirements of a public company, higher stock-compensation costs and increased expenses related to our new office in China. General legal, consulting and accounting costs increased by $0.6 million due primarily to higher audit fees, Sarbanes-Oxley Act compliance costs and tax compliance initiatives. Patent litigation defense fees increased by $1.5 million. Insurance costs also increased by $0.9 million. These increases were partially offset by realized and unrealized gains related to foreign currency of $1.2 million in 2007 as compared to $0.8 million of losses in 2006. As a percentage of sales, general and administrative expense were the same in 2007 and 2006.

Interest income (expense), net. Interest income (expense), net was $0.7 million of net interest income in 2007 compared to $1.5 million of net interest expense in 2006. The change in interest income (expense), net resulted from lower interest expense incurred after the repayment of all of our term debt in the first quarter of 2007 and higher interest income earned on the net proceeds from our IPO in December 2006.

Fair value adjustment to series B warrants. There was no expense related to the fair value adjustment of the series B warrants in 2007 as compared to $7.4 million in 2006 because we repurchased the series B warrants in December 2006. As a result, there will be no further charges to record the change in the fair value of the series B warrants.

(*Provision for) benefit from income taxes.* Provision for income taxes increased by $18.5 million to a $15.5 million expense in 2007 from a $3.0 million benefit in 2006, representing an effective tax rate of 32.6% in 2007 as compared to an effective tax benefit of 10.7% in 2006. The increase in the provision for income

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taxes was primarily due to an increase in earnings before taxes and the release in 2006 of our valuation allowance for U.S. federal net operating losses. Excluding the release of the $13.1 million valuation allowance and the fair value adjustment to the series B warrants of $7.4 million, the effective tax rate was 28.3% in 2006. The increase in the effective tax rate in 2007 is primarily due to an effective tax rate applied to U.S.-generated income of approximately 35% in 2007 as compared to an effective rate of zero percent in 2006. The increase was partially offset by a $1.1 million reduction in the carrying value of German net deferred tax liabilities due to a change in income tax rates in Germany from 38% to approximately 30%. This change in tax rates was enacted by the German government during the third quarter of 2007 and became effective on January 1, 2008.

Net income. Net income increased by $0.7 million to $29.9 million in 2007 from $29.2 million in 2006. Net income as a percentage of our net sales decreased by 4.6 percentage points to 15.8% in 2007 from 20.4% in 2006 due to the factors described above and in particular the release in 2006 of the valuation allowance for U.S. federal net operating losses, offset by the charges in 2006 related to the changes in the fair value of the series B warrants.

Comparison of Year Ended December 31, 2006 to Year Ended December 31, 2005

Net sales. Our net sales increased by $46.8 million, or 48.6%, to $143.2 million in 2006 from $96.4 million in 2005. This increase was primarily attributable to a higher volume of sales of fiber lasers in materials processing applications, where net sales increased by $42.7 million or by 91.0% of the total increase in net sales. Medical applications accounted for 8.1% of the total increase in net sales. These increases were partially offset by a slight decrease in sales in communications applications. The growth in net sales resulted primarily from increased market acceptance of high-power fiber lasers and the continued growth in sales of low and medium-power fiber lasers for materials processing. Net sales growth in medical applications resulted from an increase in net sales for aesthetic skin procedures.

Cost of sales and gross margin. Our costs of sales increased by $17.4 million, or 27.8%, to $79.9 million in 2006 from $62.5 million in 2005, as a result of the increased sales volume. Our gross margin increased to 44.2% in 2006 from 35.2% in 2005 primarily because of a reduction in the cost of our internally manufactured optical components, including semiconductor diodes, and more favorable absorption of fixed manufacturing costs as a result of higher production volumes.

Sales and marketing expense. Sales and marketing expense increased by $3.0 million, or 93.8%, to $6.2 million in 2006 from $3.2 million in 2005, primarily as a result of a $1.5 million increase in personnel costs due to the expansion of our worldwide direct sales organization and increases in related sales commissions, compensation, travel and selling expenses related to the cost of products used for demonstration purposes. As a percentage of sales, sales and marketing expense increased to 4.4% in 2006 from 3.4% in 2005.

Research and development expense. Research and development expense increased by $0.7 million, or 12.1%, to $6.5 million in 2006 from $5.8 million in 2005. This increase is primarily due to a $0.7 million increase in personnel costs related to higher headcount and increased research and development activity. Research and development activity continues to focus on enhancing the performance of our internally manufactured diodes, optical fibers and components, refining production processes to improve manufacturing yields of optical components, testing new applications for our existing products and developing new products. As a percentage of sales, research and development expense decreased to 4.6% in 2006 from 6.0% in 2005.

General and administrative expense. General and administrative expenses increased by $3.9 million, or 36.8%, to $14.5 million in 2006 from $10.6 million in 2005, primarily due to a $0.8 million increase in legal, consulting and accounting costs attributable to new litigation, internal control compliance and financial reporting, a $0.7 million increase in personnel-related expenses, a $0.6 million increase in foreign exchange losses attributable to the

depreciation of the U.S. Dollar relative to the Euro and Japanese Yen and a $0.5 million increase in depreciation. As a percentage of sales, general and administrative expense decreased to 10.1% in 2006 from 11.0% in 2005.

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Interest income (expense), net. Net interest expense decreased by $0.3 million, or 16.7%, to $1.5 million in 2006 from $1.8 million in 2005, resulting from the repayment of term debt as well as lower utilization of our German line-of-credit facilities during 2006.

Fair value adjustment to series B warrants. The fair value adjustment of the series B warrants increased by $6.7 million to $7.4 million in 2006 as a result of our IPO in December 2006.

(*Provision for) benefit from income taxes*. Our benefit from income taxes in 2006 was $3.0 million, which resulted from a reduction in our valuation allowance primarily related to the use of operating losses during the year and also the release of valuation allowances of $13.1 million related to deferred tax assets that we have determined are more likely than not to be realized. This compared to a provision for income taxes of $4.1 million in 2005. Our effective tax rate in 2006 was a benefit of 10.7% as compared to a provision of 34.2% in 2005. Excluding the impact of the release of the valuation allowance and the $7.4 million fair value adjustment to the series B warrants, which is not tax-deductible, our effective tax rate was 28.3% in 2006 compared to 32.2% in 2005. The decrease in effective tax rates is primarily due to changes in the relative amounts of our taxable income generated throughout various tax jurisdictions and benefits arising from an effective rate on income arising in the United States of zero percent because the income was offset by the use of operating losses against which we had previously established a valuation allowance.

Net income. Net income increased by $21.8 million to $29.2 million in 2006 from $7.4 million in 2005. Net income as a percentage of our net sales increased by 12.7 percentage points to 20.4% in 2006 from 7.7% in 2005.

Liquidity and Capital Resources

Our principal sources of liquidity as of December 31, 2007 consisted of cash and cash equivalents of $38.0 million, marketable securities of $7.0 million, unused credit lines and overdraft facilities of $39.9 million and working capital (excluding cash) of $83.2 million. This compares to cash and cash equivalents of $75.7 million, unused credit lines and overdraft facilities of $13.8 million and working capital (excluding cash) of $40.0 million as of December 31, 2006. The decrease in cash and cash equivalents of $37.7 million from December 31, 2006 relates primarily to capital expenditures of $34.3 million, the repayment of long-term debt of $18.2 million, investments in marketable securities of $7.0 million and increases in working capital, partially offset by cash provided by operating activities and net proceeds from our credit lines of $8.3 million.

In the first quarter of 2007, we used $18.2 million of the proceeds from our December 2006 IPO to repay substantially all of our bank term debt except for the $20.0 million subordinated, unsecured, variable-rate notes described in Note 6 to our consolidated financial statements, which mature in 2009. We expect that the existing cash and marketable securities, cash flows from operations and our existing lines of credit will be sufficient to meet our liquidity and capital needs for the foreseeable future. Our future long-term capital requirements will depend on many factors including our rate of net sales growth, the timing and extent of spending to support development efforts, the expansion of our sales and marketing activities, the timing and introductions of new products, the need to ensure access to adequate manufacturing capacity and the continuing market acceptance of our products. We have made no arrangements to obtain additional financing, and there is no assurance that such additional financing, if required or desired, will be available in amounts or on terms acceptable to us, if at all.

Although we repaid substantially all our fixed-term debt in the first quarter of 2007, we intend to maintain and use availability under our lines of credit to finance our short-term working capital requirements that may arise from time to time.

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The following table details our line-of-credit facilities as of December 31, 2007:

Description	Available Principal	Interest Rate	Maturity	Security
U.S. Revolving Line of Credit(1)	Up to $20 million	LIBOR plus 0.8% to 1.2%, depending on the Company s performance	July 2010	Unsecured
Euro Credit Facility (Germany)(2)	Euro 15.0 million ($22.1 million)	5.40%	June 2010	Unsecured, guaranteed by parent company
Euro Overdraft Facility (Germany)	Euro 1.0 million ($1.5 million)	6.95%	September 2008	Common pool of assets of German subsidiary
Euro Overdraft Facility (Germany)	Euro 0.9 million ($1.2 million)	6.95%	December 2010	Common pool of assets of German subsidiary
Euro Overdraft Facility (Italy)	Euro 0.7 million ($1.0 million)	6.50%-6.67%	December 2008	Common pool of assets of Italian subsidiary
Japanese Overdraft Facility	JPY 600 million ($5.3 million)	2.5%	September 2008	Common pool of assets of Japanese subsidiary

(1) The available principal under this facility can be increased to $25 million pursuant to certain notice requirements and other conditions.

(2) This credit facility bears interest at Euribor + 1.0% or EONIA + 1.5%.

The financial covenants in our loan documents may cause us to not take or to delay investments and actions that we might otherwise undertake because of limits on capital expenditures and amounts that we can borrow or lease. In the event that we do not comply with any one of these covenants, we would be in default under the loan agreement or loan agreements, which may result in acceleration of the debt, cross-defaults on other debt and a reduction in available liquidity, any of which could harm our results of operations and financial condition.

Operating activities. Net cash provided by operating activities was $10.7 million and $19.2 million in the years ended December 31, 2007 and 2006, respectively. This decrease in net cash provided by operating activities of $8.5 million in 2007 as compared to 2006 primarily resulted from:

a decrease in income taxes payable of $11.0 million in 2007 as compared to an increase in income taxes payable of $7.2 million in 2006. The decrease in income taxes payable in 2007 primarily resulted from estimated and prior year cash tax payments in Germany;

a decrease in accrued expenses of $2.9 million in 2007 as compared to an increase of $3.4 million in 2006; and

a decrease in accounts payable of $6.8 million in 2007 as compared to a decrease of $1.1 million in 2006; partially offset by

an increase in net income after adding back non-cash charges of $16.4 million; and

a repayment of $5.1 million of supplier convertible notes payable in 2006 that did not recur in 2007.

Cash flows generated by operating activities were $19.2 million in the year ended December 31, 2006 as compared to $13.6 million in the year ended December 31, 2005.

Given our vertical integration, rigorous and time-consuming testing procedures for both internally manufactured and externally purchased components and the lead time required to manufacture components used in our finished product, the rate at which we turn inventory has historically been low when compared to

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our cost of sales. We do not expect this to change significantly in the future and believe that we will have to maintain a relatively high level of inventory compared to our cost of sales. As a result, we continue to expect to have a significant amount of working capital invested in inventory and for changes in our level of inventory to lead to an increase in cash generated from our operations when it is sold or a decrease in cash generated from our operations at times when the amount of inventory is increasing. A reduction in our level of net sales or the rate of growth of our net sales from their current levels would mean that the rate at which we are able to convert our inventory into accounts receivable would decrease.

Investing activities. Net cash used in investing activities was $41.9 million and $19.1 million in the years ended December 31, 2007 and 2006, respectively. The cash used in investing activities in 2007 was primarily related to $34.3 million of capital expenditures on property, plant and equipment and $7.0 million to purchase marketable securities. The cash used in investing activities in 2006 was related to capital expenditures on property, plant and equipment of $20.4 million, primarily in the United States and Germany, which was partially offset by loan repayments of $1.2 million from our stockholders. In 2007 and 2006, capital expenditures in the United States, Germany, and Russia related to facilities and equipment for diode wafer growth, burn-in test stations and packaging as well as new fiber, assembly and component production facilities. We expect to continue to invest in property, plant and equipment and to use a significant amount of our cash generated from operations to finance capital expenditures, including the expansion of our manufacturing capacity, the acquisition of additional sales and application facilities and the purchase of production equipment. The timing and extent of any capital expenditures in and between periods can have a significant effect on our cash flow. Many of the capital expenditure projects that we undertake have long lead times and are difficult to cancel or defer in the event that our net sales are reduced or if our rate of growth slows, with the result that it would be difficult to defer committed capital expenditures to a later period. Net cash used in investing activities was $19.1 million in the year ended December 31, 2006 as compared to $8.6 million in the year ended December 31, 2005.

Financing activities. Net cash used by financing activities was $6.8 million in 2007 as compared to net cash provided by financing activities of $66.9 million in 2006. The cash used in financing activities in 2007 was related to repayment of $18.2 million of our long-term bank debt, partially offset by the net proceeds of $8.3 million from the use of our credit lines and $3.1 million of proceeds from the exercise of stock options and associated tax benefits. Net cash provided by financing activities in 2006 included $93.2 million of net proceeds from our IPO in December 2006, partially offset by the repurchase of the series B warrants for $22.1 million and net long-term bank debt and credit line repayments of $5.9 million. Net cash provided by financing activities was $66.9 million in the year ended December 31, 2006 as compared to $1.1 million in the year ended December 31, 2005.

Contractual Obligations

The following table describes our contractual obligations as of December 31, 2007 (in thousands).

		Payments Due in			
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Operating lease obligations	$ 9,269	$ 2,647	$ 5,705	$ 917	$
Contractual obligations(1)	12,986	11,986	1,000		
Long-term debt obligations (including interest)	23,455	1,427	22,028		

Total(2)	$ 45,710	$ 16,060	$ 28,733	$ 917	$

(1) Represents minimum purchase commitments for property, plant and equipment.

(2) Excludes obligations related to FIN 48. See Note 13.

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Recent Accounting Pronouncements

In July 2006, the FASB issued FIN No. 48, which prescribes a recognition threshold and measurement process for recording in the financial statements uncertain tax positions taken or expected to be taken in a tax return. FIN No. 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures and transitions. FIN No. 48 became effective for the Company beginning January 1, 2007. Adoption did not have a material impact on the financial statements.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* (SFAS No. 157). SFAS No. 157 provides a single definition of fair value, along with a framework for measuring it, and requires additional disclosure about using fair value to measure assets and liabilities. SFAS No. 157 emphasizes that fair value measurement is market-based, not entity-specific, and establishes a fair value hierarchy in which the highest priority is quoted prices in active markets. Under SFAS No. 157, fair value measurements are disclosed according to their level within this hierarchy. While SFAS No. 157 does not add any new fair value measurements, it does change current practice in certain ways, including requiring entities to include their own credit standing when measuring their liabilities. SFAS No. 157 was initially effective for the Company s fiscal year beginning January 1, 2008. However, in February 2008, the FASB decided that an entity need not apply this standard to nonfinancial assets and liabilities disclosed at fair value in the financial statements on a nonrecurring basis until the subsequent year. Accordingly, the Company s adoption of this standard on January 1, 2008 is limited to financial assets and liabilities. The Company does not believe the initial adoption of SFAS No. 157 will have a material effect on its financial condition or results of operations. However, the Company is still in the process of evaluating this standard with respect to its effect on nonfinancial assets and liabilities and therefore has not yet determined the impact that it will have on its financial statements upon full adoption.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS No. 159), which provides companies with an option to report selected financial assets and liabilities at fair value. SFAS No. 159 also establishes presentation and disclosure requirements relating to the use of fair values within the financial statements. The provisions of SFAS No. 159 are effective for the Company beginning after January 1, 2008. The Company does not currently expect to designate any financial assets or liabilities for the accounting allowed by SFA No. 159, and therefore expects there to be no material impact on adoption.

In December 2007, the FASB issued FAS No. 141 (revised 2007), *Business Combinations* (FAS No. 141 (revised 2007)), and FAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements-an amendment of ARB No. 51* (FAS No. 160). FAS No. 141 (revised 2007) requires an acquirer to measure the identifiable assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree at their fair values on the acquisition date, with goodwill being the excess value over the net identifiable assets acquired. This standard also requires the fair value measurement of certain other assets and liabilities related to the acquisition such as contingencies and research and development. FAS No. 160 clarifies that a noncontrolling interest in a subsidiary should be reported as a component of stockholders equity in the consolidated financial statements. Consolidated net income should include the net income for both the parent and the noncontrolling interest with disclosure of both amounts on the consolidated statement of income. The calculation of earnings per share will continue to be based on income amounts attributable to the parent. The effective date for both statements is for fiscal years beginning after December 15, 2008. The adoption of FAS No. 141 (revised 2007) is prospective. The adoption of FAS No. 160 is prospective. The impact to presentation and disclosure are applied retrospectively. We are currently in the process of evaluating the impact, if any, that the adoption of FAS No. 141 (revised 2007) and FAS No. 160 will have on our financial position, consolidated results of operations and cash flows.

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ITEM 7A. *QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK*

We are exposed to market risk in the ordinary course of business, which consists primarily of interest rate risk associated with our cash and cash equivalents and our debt and foreign exchange rate risk.

Interest rate risk. Our investments have limited exposure to market risk. To minimize this risk, we maintain a portfolio of cash, cash equivalents and short-term investments, consisting primarily of bank deposits, money market funds and short-term government funds. The interest rates are variable and fluctuate with current market conditions. Because of the short-term nature of these instruments, a sudden change in market interest rates would not be expected to have a material impact on our financial condition or results of operations.

Our exposure to market risk also relates to the increase or decrease in the amount of interest expense we must pay on our bank debt and borrowings on our bank credit facilities. The interest rate on our existing bank debt is currently fixed except for our U.S. revolving line of credit. The rates on our Euro overdraft facilities in Germany and Italy and our Japanese Yen overdraft facility are fixed for twelve-month periods. Approximately 78% of our outstanding debt had a fixed rate of interest as of December 31, 2007. All of our U.S. and German term debt was repaid in the first quarter of 2007 except for the $20 million of subordinated notes issued to our series B stockholders upon completion of our IPO. We do not believe that a 10% change in market interest rates would have a material impact on our financial position or results of operations.

Exchange rates. Due to our international operations, a significant portion of our net sales, cost of sales and operating expenses are denominated in currencies other than the U.S. dollar, principally the Euro and the Japanese Yen. As a result, our international operations give rise to transactional market risk associated with exchange rate movements of the U.S. dollar, the Euro and the Japanese Yen. Gains and losses on foreign exchange transactions are reported as a component of general and administrative expense and totaled a $1.2 million gain, and a $0.8 million loss and a $0.1 million loss for the years ended December 31, 2007, 2006 and 2005, respectively. Changes in exchange rates can also affect our financial results. If exchange rates in the year ended December 31, 2007 had been the same as in the previous year, we estimate that our sales would have been lower by approximately $7.2 million. Additionally, we estimate that cost of sales and operating expenses would have been lower by approximately $5.1 million for the year ended December 31, 2007.

During the third quarter of 2007, we entered into a foreign currency forward contract, not designated as a hedging instrument under SFAS No. 133, to offset certain exposures from inter-company loans, receivables and payables. In the fourth quarter of 2007, a loss of $0.4 million was realized on this foreign currency forward contract when it was settled. No derivative instruments were outstanding at December 31, 2007. Management believes that the use of foreign currency financial instruments reduces the risks of certain foreign currency transactions, however, these instruments provide only limited protection. We will continue to analyze our exposure to currency exchange rate fluctuations and may engage in additional financial hedging techniques in the future to attempt to minimize the effect of these potential fluctuations. Exchange rate fluctuations may adversely affect our financial results in the future.

ITEM 8. *FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA*

This information is incorporated by reference from pages F-1 through F-24 of this report.

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

None.

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ITEM 9A. *CONTROLS AND PROCEDURES*

Evaluation of Disclosure Controls and Procedures

Under the supervision of our Chief Executive Officer and our Chief Financial Officer, our management has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act)), as of the end of the period covered by this Annual Report on Form 10-K (the Evaluation Date). Based upon that evaluation, our chief executive officer and our chief financial officer have concluded that, as of the Evaluation Date, our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission s rules and forms.

Management s Annual Report on Internal Control Over Financial Reporting

Our management, including our Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and its subsidiaries. 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. Our management conducted an assessment of the effectiveness of our internal control over financial reporting as of the Evaluation Date based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, our management concluded that, as of the Evaluation Date, our internal control over financial reporting was effective.

Our independent registered public accounting firm, Deloitte & Touche LLP, has audited our internal control over financial reporting, as stated in their report below.

Changes in Internal Controls

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Controls

Our management (including our Chief Executive Officer and Chief Financial Officer) does not expect that the disclosure controls and procedures or internal controls over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed 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. Due to the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, errors and instances of fraud, if any, within the company have been or will be detected.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
IPG Photonics Corporation
Oxford, MA

We have audited the internal control over financial reporting of IPG Photonics Corporation and subsidiaries (the Company) as of December 31, 2007, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company s management is responsible 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 Management s Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company s internal control over financial reporting is a process designed by, or under the supervision of, the company s principal executive and principal financial officers, or persons performing similar functions, and effected by the company s board of directors, management, and other personnel 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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2007, based on the criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2007 of the Company and our report dated March 10, 2008 expressed an unqualified opinion on those financial statements.

/s/ Deloitte & Touche LLP

Boston, MA
March 10, 2008

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ITEM 9B. ***OTHER INFORMATION***

None.

PART III

ITEM 10. ***DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE***

The information required hereunder is incorporated herein by reference to our definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after December 31, 2007.

ITEM 11. ***EXECUTIVE COMPENSATION***

The information required hereunder is incorporated herein by reference to our definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after December 31, 2007.

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

The information required hereunder is incorporated herein by reference to our definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after December 31, 2007, with the exception of the information regarding securities authorized for issuance under our equity compensation plans, which is set forth in Item 5, Information Regarding Equity Compensation Plans and is incorporated herein by reference.

ITEM 13. ***CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE***

The information required hereunder is incorporated herein by reference to our definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after December 31, 2007.

ITEM 14. ***PRINCIPAL ACCOUNTING FEES AND SERVICES***

The information required hereunder is incorporated herein by reference to our definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after December 31, 2007.

PART IV

ITEM 15. ***EXHIBITS AND FINANCIAL STATEMENT SCHEDULES***

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements.

See Index to Financial Statements on page F-1.

(2) Financial Statement Schedules.

See Index to Financial Statements on page F-1. All schedules are omitted because they are not applicable or the required information is shown on the financial statements or notes thereto.

(3) The exhibits listed on the Index to Exhibits preceding the Exhibits attached hereto are filed with this Form 10-K or incorporated by reference as set forth therein.

(b) Exhibits.

See (a)(3) above.

(c) Additional Financial Statement Schedules.

All schedules are omitted because they are not applicable or the required information is shown on the financial statements or notes thereto.

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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, on March 13, 2008.

IPG Photonics Corporation

By: /s/ Valentin P. Gapontsev

Valentin P. Gapontsev
Chief Executive Officer and
Chairman of the Board

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.

Signature	Title	
/s/ Valentin P. Gapontsev Valentin P. Gapontsev	Chief Executive Officer, Chairman of the Board and Director (Principal Executive Officer)	March 13, 2008
/s/ Timothy P.V. Mammen Timothy P.V. Mammen	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 13, 2008
/s/ Robert A. Blair Robert A. Blair	Director	March 13, 2008
/s/ Michael C. Child Michael C. Child	Director	March 13, 2008
/s/ John H. Dalton John H. Dalton	Director	March 13, 2008
/s/ Henry E. Gauthier Henry E. Gauthier	Director	March 13, 2008
/s/ William S. Hurley	Director	March 13, 2008

William S. Hurley		
/s/ William F. Krupke	Director	March 13, 2008
William F. Krupke		
/s/ Eugene Shcherbakov	Director	March 13, 2008
Eugene Shcherbakov		
/s/ Igor Samartsev	Director	March 13, 2008
Igor Samartsev		

INDEX TO FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
IPG Photonics Corporation
Oxford, Massachusetts

We have audited the accompanying consolidated balance sheets of IPG Photonics Corporation and subsidiaries (the Company) as of December 31, 2007 and 2006, and the related consolidated statements of income, convertible redeemable preferred stock and stockholders equity (deficit), and cash flows for each of the three years in the period ended December 31, 2007. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on the financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes 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, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of IPG Photonics Corporation and subsidiaries as of December 31, 2007 and 2006, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2007, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2, the Company adopted Statement of Financial Accounting Standards No. 123(R), Share-Based Payment, effective January 1, 2006.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company s internal control over financial reporting as of December 31, 2007, based on the criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 10, 2008 expressed an unqualified opinion on the Company s internal control over financial reporting.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 10, 2008

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IPG PHOTONICS CORPORATION

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2007	2006
	(In thousands, except share and per share data)	
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 37,972	$ 75,667
Marketable securities, at fair value	6,950	
Accounts receivable, net	33,946	22,353
Inventories, net	60,412	42,162
Income taxes receivable	3,145	80
Prepaid expenses and other current assets	7,071	6,586
Deferred income taxes	6,195	9,591
Total current assets	155,691	156,439
DEFERRED INCOME TAXES	2,795	3,801
PROPERTY, PLANT, AND EQUIPMENT Net	96,369	67,153
OTHER ASSETS	8,466	5,099
TOTAL	$ 263,321	$ 232,492
LIABILITIES AND STOCKHOLDERS EQUITY		
CURRENT LIABILITIES:		
Revolving line-of-credit facilities	$ 11,218	$ 2,603
Current portion of long-term debt		8,299
Accounts payable	9,444	7,640
Accrued expenses and other liabilities	13,724	13,940
Income taxes payable	96	8,289
Total current liabilities	34,482	40,771
DEFERRED INCOME TAXES AND OTHER LONG-TERM LIABILITIES	4,204	232
LONG-TERM DEBT	20,000	30,068
COMMITMENTS AND CONTINGENCIES (Notes 6, 10 and 13)		
MINORITY INTERESTS	4,455	2,827
STOCKHOLDERS EQUITY:		
Common stock, $0.0001 par value 175,000,000 shares authorized at December 31, 2007 and 2006, 44,012,341 and 42,901,612 issued and outstanding at December 31, 2007 and 2006, respectively	4	4

Additional paid-in capital	275,506	271,122
Notes receivable from stockholders		(23)
Accumulated deficit	(90,497)	(120,392)
Accumulated other comprehensive income	15,167	7,883
Total stockholders equity	200,180	158,594
TOTAL	$ 263,321	$ 232,492

See notes to consolidated financial statements.

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IPG PHOTONICS CORPORATION

CONSOLIDATED STATEMENTS OF INCOME

	Year Ended December 31,		
	2007	2006	2005
	(In thousands, except per share data)		
NET SALES	$ 188,677	$ 143,225	$ 96,385
COST OF SALES	103,695	79,931	62,481
GROSS PROFIT	84,982	63,294	33,904
OPERATING EXPENSES:			
Sales and marketing	10,103	6,222	3,236
Research and development	9,527	6,544	5,788
General and administrative	19,028	14,522	10,598
Total operating expenses	38,658	27,288	19,622
OPERATING INCOME	46,324	36,006	14,282
OTHER INCOME (EXPENSE) Net:			
Interest income (expense) net	674	(1,493)	(1,840)
Fair value adjustment to Series B Warrants		(7,444)	(745)
Other income net	612	1,050	236
Total other income (expense)	1,286	(7,887)	(2,349)
INCOME BEFORE (PROVISION FOR) BENEFIT FROM INCOME TAXES AND MINORITY INTERESTS IN CONSOLIDATED SUBSIDIARIES	47,610	28,119	11,933
(PROVISION FOR) BENEFIT FROM INCOME TAXES	(15,522)	2,995	(4,080)
MINORITY INTERESTS IN CONSOLIDATED SUBSIDIARIES	(2,193)	(1,881)	(426)
NET INCOME	29,895	29,233	7,427
Accretion of series B preferred stock		(1,994)	(2,351)
Beneficial conversion feature		(18,267)	
NET INCOME APPLICABLE TO COMMON STOCKHOLDERS	$ 29,895	$ 8,972	$ 5,076
NET INCOME PER SHARE:			
Basic	$ 0.69	$ 0.27	$ 0.16
Diluted	$ 0.65	$ 0.26	$ 0.16
WEIGHTED AVERAGE SHARES OUTSTANDING:			
Basic	43,269	27,896	26,232
Diluted	45,749	33,005	30,167

See notes to consolidated financial statements.

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IPG PHOTONICS CORPORATION

CONSOLIDATED STATEMENTS OF CONVERTIBLE REDEEMABLE PREFERRED STOCK AND STOCKHOLDERS EQUITY (DEFICIT)

e Redeemable Preferred Stock Series D		Convertible Preferred Stock Series A		Common Stock		Additional	Note Receivable		
Amount	Shares	Amount	Shares	Amount	Shares	Par Value	Paid-in Capital	From Stockholders	Deferred Compensation	Accum Def
				(In thousands, except share and per share data)						
88,897	2,684,211	$ 5,100	488,000	$ 4,880	25,991,576	$ 3	$ 96,262	$ (463)	$	$ (15
2,351							(2,351)			
							118		(118)	
									7	
					667,636	1	1,000			
91,248	2,684,211	5,100	488,000	4,880	26,659,212	4	95,029	(463)	(111)	(14
										2
								440		
							(111)		111	
1,994							(1,994)			
					6,241,379		93,169			
(18,204)				(63)			18,267			
			(488,000)	(4,817)	359,463		4,817			

(55,038)				7,252,927		55,038					
	(2,684,211)	(5,100)		1,683,168		5,100					
(20,000)											
				(38)							
				705,501		1,076					
						198					
						533					
				42,901,612	4	271,122	(23)				(12
											2
							23				
						1,324					
				1,110,729		2,007					
						1,053					
	$		$	44,012,341	$ 4	$ 275,506	$	$	$		(9

See notes to consolidated financial statements.

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IPG PHOTONICS CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2007	2006	2005
	(In thousands)		
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	$ 29,895	$ 29,233	$ 7,427
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	12,304	9,105	8,092
Deferred income taxes	8,116	(10,159)	2,732
Stock-based compensation	1,324	533	7
Other	(42)	214	9
Changes related to unrealized (gains) losses on foreign currency transactions	(1,050)	1,115	
Provision for inventory, warranty and bad debt	4,077	1,037	1,861
Fair value adjustment to Series B Warrants		7,443	745
Minority interests in consolidated subsidiaries	2,193	1,881	426
Changes in assets and liabilities that provided (used) cash:			
Accounts receivable	(11,292)	(6,876)	(5,599)
Due from affiliates net		854	236
Inventories	(15,305)	(19,884)	(4,011)
Prepaid expenses and other current assets	(6,756)	(1,148)	(312)
Accounts payable	1,086	342	(1,030)
Repayment of convertible supplier note		(5,100)	
Accrued expenses and other liabilities	(2,889)	3,447	4,088
Income and other taxes payable	(11,004)	7,165	(1,086)
Net cash provided by operating activities	10,657	19,202	13,585
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of property, plant, and equipment	(34,341)	(20,442)	(15,989)
Proceeds from sale of property, plant, and equipment	78	90	782
Purchase of marketable securities	(6,950)		
Purchase of minority interests in consolidated subsidiaries	(596)		
Employee and stockholder loans repaid	(69)	1,225	
Restricted cash released to support construction loan			6,566
Net cash used in investing activities	(41,878)	(19,127)	(8,641)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from line-of-credit facilities	36,542	16,695	9,561
Payments on line-of-credit facilities	(28,269)	(18,282)	(9,384)
Principal payments on long-term borrowings	(18,177)	(10,684)	(2,263)

Proceeds from long-term borrowings		6,384	2,209
Exercise of employee stock options and related tax benefits	3,060	1,274	1,001
Repayment of Series B Warrants		(22,087)	
Proceeds from initial public offering, net of offering expenses		93,169	
Repayment of note due from stockholder	23	440	
Minority interest capital contribution	34		11
Net cash (used in) provided by financing activities	(6,787)	66,909	1,135
EFFECT OF CHANGES IN EXCHANGE RATES ON CASH AND CASH EQUIVALENTS	313	322	(266)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(37,695)	67,306	5,813
CASH AND CASH EQUIVALENTS Beginning of period	75,667	8,361	2,548
CASH AND CASH EQUIVALENTS End of period	$ 37,972	$ 75,667	$ 8,361
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Cash paid for interest	$ 741	$ 1,449	$ 2,046
Income taxes paid	$ 16,788	$ 2,010	$ 1,989
Non-cash transactions:			
Beneficial conversion feature embedded in Series B Preferred Stock	$	$ 18,267	$
Accretion of Series A and Series B Preferred Stock	$	$ 1,994	$ 2,351
Issuance of subordinated notes upon conversion of Series B Preferred Stock	$	$ 20,000	$
Exchange of IP Fibre Devices credit facility for stockholder note	$	$ 4,614	$
Additions to property, plant and equipment included in accounts payable	$ 4,977	$ 996	$

See notes to consolidated financial statements.

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IPG PHOTONICS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. NATURE OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business IPG Photonics Corporation (the Company) designs and manufactures a broad line of high-performance fiber lasers and fiber amplifiers for diverse applications in numerous markets, such as materials processing, advanced applications, communications and medical. The Company s world headquarters are located in Oxford, Massachusetts. The Company also has facilities and sales offices elsewhere in the United States, Europe and Asia.

Principles of Consolidation The Company was incorporated as a Delaware corporation in December 1998. The accompanying financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated.

Use of Estimates The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Foreign Currency The financial information for entities outside the United States is measured using local currencies as the functional currency, except for our Russian subsidiary, for which the functional currency is deemed to be the U.S. dollar. Assets and liabilities are translated into U.S. dollars at the exchange rate in effect on the respective balance sheet dates. Income and expenses are translated into U.S. dollars based on the average rate of exchange for the corresponding period. Exchange rate differences resulting from translation adjustments are accounted for directly as a component of accumulated other comprehensive income except in Russia where translation gains and losses are reported in net income. Gains or losses from foreign currency transactions are reflected in the consolidated statements of income.

Cash and Cash Equivalents Cash and cash equivalents consist primarily of highly liquid investments, such as bank deposits, with insignificant interest rate risk and original maturities of three months or less at the date of acquisition.

Marketable Securities Marketable securities consist primarily of auction-rate securities. Auction-rate securities trade on a shorter term than the maturity date of the underlying instrument based on an auction bid that resets the interest rate of the security. The auction or reset dates occur at intervals of generally less than 90 days. The Company classifies these investments as available for sale as the securities are not held to the maturity date of the underlying instrument and the maturity date of the underlying instrument is greater than 3 months. These securities are carried at fair value.

Inventories Inventories are stated at the lower of cost or market on a first-in, first-out basis. Inventories include parts and components that may be specialized in nature and subject to rapid obsolescence. The Company periodically reviews the quantities and carrying values of inventories to assess whether the inventories are recoverable. The costs associated with provisions for excess quantities, technological obsolescence, or component rejection are charged to cost of sales as incurred.

Property, Plant, and Equipment Property, plant, and equipment are stated at cost, less accumulated depreciation. Depreciation is determined using the straight-line method based on the estimated useful lives of the related assets. In the case of leasehold improvements, the estimated useful lives of the related assets do

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

not exceed the remaining terms of the corresponding leases. The following table presents the assigned economic useful lives of property, plant, and equipment:

Category	Economic Useful Life
Buildings	30 years
Machinery and equipment	3-5 years
Office furniture and fixtures	3-5 years
Other assets	3-5 years

Expenditures for maintenance and repairs are charged to operations. Interest expense associated with significant capital projects is capitalized as a cost of the project. The Company capitalized $178,000, $198,000 and $239,000 of interest expense in 2007, 2006 and 2005, respectively.

Impairment of Long-Lived Assets Long-lived assets, which consist primarily of property, plant, and equipment, are reviewed by management for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In cases in which undiscounted expected future cash flows are less than the carrying value, an impairment loss is recorded equal to the amount by which the carrying value exceeds the fair value of assets. No impairment losses have been recorded during the periods presented.

Revenue Recognition The Company recognizes revenue in accordance with SEC Accounting Bulletin, or SAB, No. 104, *Revenue Recognition* (SAB No. 104). SAB No. 104 requires that four basic criteria be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services have been rendered; (3) the fee is fixed and determinable; and (4) collectibility is reasonably assured. Revenue from the sale of the Company s products is generally recognized upon shipment, provided that the other revenue recognition criteria have been met. The Company has no obligation to provide upgrades, enhancements or customer support subsequent to the sale, other than warranty.

Revenue from orders with multiple deliverables is divided into separate units of accounting when certain criteria are met. The consideration for the arrangement is then allocated to the separate units of accounting based on their relative fair values. The Company defers revenue on multiple element arrangements if the fair values of all deliverables are not known or if customer acceptance is contingent on delivery of specified items or performance conditions and if the performance conditions cannot be satisfactorily tested prior to shipment or if the Company has not met such conditions in the past. Applicable revenue recognition criteria are then applied separately for each separate unit of accounting.

Returns and customer credits are infrequent and are recorded as a reduction to revenue. Rights of return are generally not included in sales arrangements. Generally, the Company receives a customer purchase order as evidence of an arrangement and product shipment terms are free on board (F.O.B.) shipping point. Some of our revenue arrangements include customer acceptance clauses. Revenue is deferred until customer acceptance has been obtained.

Allowance for Doubtful Accounts The Company maintains an allowance for doubtful accounts to provide for the estimated amount of accounts receivable that will not be collected. The allowance is based upon an assessment of customer creditworthiness, historical payment experience and the age of outstanding receivables.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Activity related to the allowance for doubtful accounts was as follows (in thousands):

Balance at January 1, 2005	$ 172
Provision for bad debts	43
Uncollectible accounts written off	(24)
Foreign currency translation	7
Balance at December 31, 2005	198
Provision for bad debts	25
Uncollectible accounts written off	(4)
Foreign currency translation	8
Balance at December 31, 2006	227
Provision for bad debts	72
Uncollectible accounts written off	(3)
Foreign currency translation	13
Balance at December 31, 2007	$ 309

Warranties In general, the Company s products carry a warranty against defect for a period of one to three years, depending upon the product type and customer negotiations. The expected cost associated with these warranty obligations is recorded when the revenue is recognized. Warranty costs and related accrued warranty costs were not significant for the periods presented.

Advertising Expense The cost of advertising is expensed as incurred. The Company conducts substantially all of its sales and marketing efforts through trade shows, professional and technical conferences, direct sales and use of its website. The Company s advertising costs were not significant for the periods presented.

Research and Development Research and development costs are expensed as incurred.

Income Taxes Deferred tax assets and liabilities are recognized for the future tax consequences of temporary differences between the financial statement carrying amounts and tax bases of assets and liabilities and net operating loss carryforwards and credits using enacted rates in effect when those differences are expected to reverse. Valuation allowances are provided against deferred tax assets that are not deemed to be recoverable. The Company recognizes tax positions that are more likely than not to be sustained upon examination by relevant tax authorities. The tax positions are measured at the greatest amount of tax benefit that is more than 50 percent likely to be realized upon ultimate settlement.

The Company provides reserves for potential payments of tax to various tax authorities related to uncertain tax positions and other issues. Prior to 2007, these reserves were recorded when management determined that it was probable that a loss would be incurred related to these matters and the amount of the loss was reasonably determinable. In 2007, the Company adopted the Financial Accounting Standards Board (FASB) Interpretation

No. 48, *Accounting for Uncertainty in Income Taxes* (FIN No. 48). As a result, reserves recorded subsequent to adoption are based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more likely than not to be realized following resolution of any potential contingencies present related to the tax benefit, assuming that the matter in question will be raised by the tax authorities. Potential interest and penalties associated with such uncertain tax positions are recorded as a component of income tax expense.

Concentration of Credit Risk Financial instruments that potentially subject the Company to credit risk consist primarily of cash and cash equivalents, marketable securities and accounts receivable. The Company maintains substantially all of its cash and marketable securities in four financial institutions, which are

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

believed to be high-credit, quality financial institutions. The Company grants credit to customers in the ordinary course of business and provides a reserve for potential credit losses. Such losses historically have been within management s expectations (see discussion related to significant customers in Note 14).

Fair Value of Financial Instruments The Company s financial instruments consist of marketable securities, accounts receivable, accounts payable and long-term debt. The current carrying amounts of such instruments are considered reasonable estimates of their fair market value, due to the short maturity of these instruments or as a result of the competitive market interest rates, which have been negotiated.

Comprehensive Income Comprehensive income includes charges and credits to equity that are not the result of transactions with stockholders. Included in other comprehensive income for the Company is the cumulative translation adjustment. These adjustments are accumulated within the consolidated statements of convertible redeemable preferred stock and stockholders equity (deficit) under accumulated other comprehensive income.

Derivative Instruments The Company has historically entered into financial instruments that constitute freestanding derivative instruments. The Company accounts for these arrangements in accordance with the FASB s Statement of Financial Accounting Standards (SFAS) No. 133, *Accounting for Derivative Instruments and Hedging Activities* (SFAS No. 133), as well as related interpretations. Derivative instruments are recognized as either assets or liabilities in the balance sheets and are measured at fair value with gains or losses recognized in earnings or other comprehensive income depending on the nature of the derivative. The Company determines the fair value of derivative instruments based on available market data using appropriate valuation models, giving consideration to all of the rights and obligations of each instrument.

The Company occasionally enters into a financial instrument that contains a derivative instrument that is embedded in the financial instrument. Upon entering into the instrument, the Company assesses (i) whether the economic characteristics of the embedded derivative are clearly and closely related to the economic characteristics of the remaining component of the financial instrument (i.e. the host contract), (ii) whether a separate instrument with the same terms as the embedded instrument would meet the definition of a derivative instrument and (iii) whether the instrument is indexed to the Company s own stock and would be classified in stockholders equity. When it is determined that (1) the embedded derivative possesses economic characteristics that are not clearly and closely related to the economic characteristics of the host contract, (2) a separate instrument with the same terms would qualify as a derivative instrument or (3) the embedded derivative is not indexed to the Company s own stock or would be classified outside of stockholders equity, the embedded derivative is separated from the host contract and carried at fair value.

Beneficial Conversion When the Company issues debt or equity that is convertible into common stock at a discount from the common stock fair value at the date the debt or equity is issued, a beneficial conversion feature for the difference between the fair value and the conversion price multiplied by the number of shares issuable upon conversion is recorded as a beneficial conversion charge or deemed dividend. The beneficial conversion feature is presented as a discount to the related debt or a deemed dividend to the related equity holders, with an offsetting amount increasing additional paid-in capital.

Business Segment Information SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information* (SFAS No. 131), establishes standards for reporting information about operating segments. The Company is structured with ten distinct legal entities in nine different countries; however, the Company operates in one segment as each of

its legal entities have similar economic characteristics and each meets the criteria for aggregation as defined in SFAS No. 131. All of the Company s operations involve the design, development, production and distribution of fiber lasers, fiber amplifiers and related optical components. As disclosed in Note 14, the Company monitors and maintains information on the sale of its products into its various end markets, including (i) materials processing, (ii) advanced applications, (iii) telecommunications and (iv) medical, but the Company does not maintain separate operating financial information for these

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

end markets or on any other basis. The Company s product lines, customer base and manufacturing processes are similar throughout the world, with little distinction between legal entity or product end market. The Company has a single, company-wide management team that administers all properties as a whole rather than as discrete operating segments. The chief decision maker, who is the company s Chief Executive Officer, measures financial performance as a single enterprise and not on legal entity or end-market basis. Throughout the year, the chief decision maker allocates capital resources on a project-by-project basis across the Company s entire asset base to maximize profitability without regard to legal entity or end-market basis.

Recent Accounting Pronouncements In July 2006, the FASB issued FIN No. 48, which prescribes a recognition threshold and measurement process for recording in the financial statements uncertain tax positions taken or expected to be taken in a tax return. FIN No. 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures and transitions. FIN No. 48 became effective for the Company beginning January 1, 2007. Adoption did not have a material impact on the financial statements. See Note 13.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* (SFAS No. 157). SFAS No. 157 provides a single definition of fair value, along with a framework for measuring it, and requires additional disclosure about using fair value to measure assets and liabilities. SFAS No. 157 emphasizes that fair value measurement is market-based, not entity-specific, and establishes a fair value hierarchy in which the highest priority is quoted prices in active markets. Under SFAS No. 157, fair value measurements are disclosed according to their level within this hierarchy. While SFAS No. 157 does not add any new fair value measurements, it does change current practice in certain ways, including requiring entities to include their own credit standing when measuring their liabilities. SFAS No. 157 was initially effective for the Company s fiscal year beginning January 1, 2008. However, in February 2008, the FASB decided that an entity need not apply this standard to nonfinancial assets and liabilities disclosed at fair value in the financial statements on a nonrecurring basis until the subsequent year. Accordingly, the Company s adoption of this standard on January 1, 2008 is limited to financial assets and liabilities. The Company does not believe the initial adoption of SFAS No. 157 will have a material effect on its financial condition or results of operations. However, the Company is still in the process of evaluating this standard with respect to its effect on nonfinancial assets and liabilities and therefore has not yet determined the impact that it will have on its financial statements upon full adoption.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS No. 159), which provides companies with an option to report selected financial assets and liabilities at fair value. SFAS No. 159 also establishes presentation and disclosure requirements relating to the use of fair values within the financial statements. The provisions of SFAS No. 159 are effective for the Company beginning after January 1, 2008. The Company does not currently expect to designate any financial assets or liabilities for the accounting allowed by SFAS No. 159, and therefore expects there to be no material impact on adoption.

In December 2007, the FASB issued FAS No. 141 (revised 2007), *Business Combinations* (FAS No. 141 (revised 2007)), and FAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements-an amendment of ARB No. 51* (FAS No. 160). FAS No. 141 (revised 2007) requires an acquirer to measure the identifiable assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree at their fair values on the acquisition date, with goodwill being the excess value over the net identifiable assets acquired. This standard also requires the fair value measurement of certain other assets and liabilities related to the acquisition such as contingencies and research and development. FAS No. 160 clarifies that a noncontrolling interest in a subsidiary should be reported as a component

of stockholders equity in the consolidated financial statements. Consolidated net income should include the net income for both the parent and the noncontrolling interest with disclosure of both amounts on the consolidated statement of income. The calculation of earnings per share will continue to be based on income amounts attributable to the parent. The effective date for both

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

statements is for fiscal years beginning after December 15, 2008. The adoption of FAS No. 141 (revised 2007) is prospective. The adoption of FAS No. 160 is prospective. The impact to presentation and disclosure are applied retrospectively. We are currently in the process of evaluating the impact, if any, that the adoption of FAS No. 141 (revised 2007) and FAS No. 160 will have on our financial position, consolidated results of operations and cash flows.

2. STOCK-BASED COMPENSATION

Stock-based compensation is included in the following financial statement captions for the years ended December 31, as follows (in thousands):

	2007	2006	2005
Cost of sales	$ 285	$ 127	$ 4
Sales and marketing	113	62	1
Research and development	237	43	1
General and administrative	689	301	1
Total stock-based compensation	1,324	533	7
Tax benefit recognized	(392)	(158)	
Net stock-based compensation	$ 932	$ 375	$ 7

Effective January 1, 2006, the Company adopted the provisions of SFAS No. 123 (revised 2004), *Share-Based Payment* (SFAS No. 123(R)). SFAS No. 123(R) establishes accounting for stock-based awards exchanged for employee s services and other stock-based transactions. For the years prior to January 1, 2006, the Company elected to account for stock-based compensation awarded to employees and directors using the intrinsic value method prescribed in Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees*. Accordingly, for financial reporting purposes, compensation cost for stock options granted to employees and directors was measured as the excess, if any, of the estimated fair market value of the Company s stock at the deemed measurement date over the amount an employee or director must pay to acquire the stock.

The Company adopted SFAS No. 123(R) using the prospective transition method. Under this method, compensation costs recorded during 2007 and 2006 include: (a) compensation costs for all share-based payment awards granted or modified prior to, but not yet vested as of January 1, 2006, based on the intrinsic value in accordance with the original provisions of APB 25; and (b) compensation costs for all share-based payment awards granted subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS No. 123(R). The Company allocates and records stock-based compensation expense on a straight-line basis over the requisite service period.

Under SFAS No. 123(R), the Company calculates the fair value of stock option grants using the Black-Scholes option-pricing model. Determining the appropriate fair value model and calculating the fair value of stock-based payment awards require the use of highly subjective assumptions, including the expected life of the stock-based

payment awards and stock price volatility. The assumptions used in calculating the fair value of stock-based payment awards represent management s best estimates, but the estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and the Company uses different assumptions, the Company s stock-based compensation expense could be materially different in the future. The weighted average assumptions used in the Black-Scholes model were 6.25 years for the expected term, 65% for the expected volatility, and 0% for dividend yield for the years ended December 31, 2007 and 2006. The weighted average risk-free rate was 4.51% and 4.75% for the years ended December 31, 2007 and 2006, respectively.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The weighted average expected option term reflects the application of the simplified method set forth in Securities and Exchange Commission Staff Accounting Bulletin, or SAB, No. 107. The simplified method defines the life as the average of the contractual term of the options and the weighted average vesting period for all option tranches.

Because the Company s common stock has been publicly traded since December 2006, there is a lack of sufficient company-specific historical and implied volatility information. The Company based its estimate of expected volatility on the expected volatility of similar entities whose share prices are publicly available. The Company used the following factors to identify similar public entities: industry, stage of life cycle, size and profitability. The Company intends to continue to consistently apply this process using the same or similar entities until a sufficient amount of historical information regarding the volatility of its own share price becomes available, or unless circumstances change such that the identified entities are no longer similar to the Company. In this latter case, more suitable, similar entities whose share prices are publicly available would be utilized in the calculation.

SFAS No. 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The stock-based compensation recorded for 2007 and 2006 reflects an estimated forfeiture rate of 5%.

In accordance with the prospective transition method, the Company s financial statements for prior periods have not been restated to reflect, and do not include, the impact of SFAS No. 123(R). If the compensation costs for options awarded to employees and directors had been determined and accounted for using the fair value method, the recorded net income in 2005 would not have been materially different than that reported.

Incentive Plans In April 2000, the Company s board of directors adopted the 2000 Incentive Compensation Plan, or 2000 plan, and in February 2006, the Company s board of directors adopted the 2006 Incentive Compensation Plan, or 2006 plan, which provide for the issuance of stock options and other stock and non-stock based awards to the Company s directors, employees, consultants and advisors. The Company reserved 5,833,333 shares under the 2000 plan and 4,000,000 shares under the 2006 plan for the issuance of awards under the plans. In June 2006, the Company s board of directors adopted the Non-Employee Directors Stock Plan (the Directors Plan). Only non-employee directors are eligible to receive awards under the Directors Plan. The Company reserved 166,666 shares for issuance under the Directors Plan. Under the three plans, the Company may grant nonstatutory stock options at an exercise price at least equal to the fair market value of the Company s common stock on the date of grant, unless the board of directors or compensation committee determines otherwise on the date of grant. Incentive stock options may be granted under the 2000 plan and the 2006 plan at exercise prices equal to or exceeding the fair market value of the common stock on the date of grant. Options generally become exercisable over periods of two to five years and expire seven to ten years from the date of the grant. The awards under the 2000 plan and the 2006 plan may become exercisable earlier upon the occurrence of certain change of control events at the election of the board of directors or compensation committee, and all awards under the Directors Plan automatically become exercisable upon a change of control. At December 31, 2007, 2,878,913 shares were available for future grant under the three option plans.

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A summary of option activity is presented below:

	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (In years)	Aggregate Intrinsic Value (In thousands)
Outstanding January 1, 2007	4,392,161	2.70		
Granted	278,002	19.48		
Exercised	(1,110,729)	1.81		
Forfeited	(27,454)	11.55		
Outstanding December 31, 2007	3,531,980	$ 4.23	6.94	$ 55,751
Vested or expected to vest December 31, 2007	3,448,132	$ 4.17	6.73	$ 54,630
Exercisable December 31, 2007	1,855,013	$ 2.02	5.75	$ 33,329
Exercisable December 31, 2006	2,239,561	$ 1.57		
Exercisable December 31, 2005	2,308,992	$ 1.55		

The intrinsic value of the options exercised during the year ended December 31, 2007 and 2006 was $20,330,000 and $1,495,000, respectively. Options exercised during the year ended December 31, 2005 had no intrinsic value. The weighted-average minimum value of the options granted to employees in the year ended December 31, 2005 was $0.39. The weighted-average grant-date fair value of the options granted to employees in the years ended December 31, 2007 and 2006, was $13.39 and $3.20, respectively.

Additional information regarding options outstanding is as follows:

	December 31, 2007	
Exercise Price	Number Outstanding	Weighted-Average Remaining Contractual Life (Years)
$ 0 - 2.12	2,138,327	5.88

2.13 - 4.25	142,682	8.17
4.25 - 6.37	638,739	8.29
6.38 - 8.50	349,230	8.53
8.51 - 21.24	263,002	9.06
	3,531,980	6.94

The total compensation cost related to nonvested awards not yet recorded at December 31, 2007 was $5,199,000, which is expected to be recognized over 3.2 years on a weighted average basis.

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3. INVENTORIES

Inventories consist of the following (in thousands):

	December 31, 2007	2006
Components and raw materials	$ 25,363	$ 19,244
Work-in-process	25,831	12,886
Finished goods	9,218	10,032
Total	$ 60,412	$ 42,162

The Company recorded inventory provisions totaling $2,461,000, $1,037,000 and $1,861,000 in 2007, 2006 and 2005, respectively. These provisions were recorded as a result of the changes in market prices of certain components, the realizable value of those inventories through finished product sales and uncertainties related to the recoverability of the value of inventories due to technological changes and excess quantities. These provisions are reported as a reduction to components and raw materials and finished goods.

4. PROPERTY, PLANT, AND EQUIPMENT

Property, plant, and equipment consist of the following (in thousands):

	December 31, 2007	2006
Land	$ 7,283	$ 6,656
Buildings	61,440	41,916
Machinery and equipment	64,318	51,621
Office furniture and fixtures	11,585	7,465
Construction-in-progress	12,661	10,191
Total property, plant, and equipment	157,287	117,849
Accumulated depreciation	(60,918)	(50,696)
Total property, plant, and equipment net	$ 96,369	$ 67,153

5. ACCRUED EXPENSES AND OTHER LIABILITIES

Accrued expenses and other liabilities consist of the following (in thousands):

	December 31, 2007	2006
Accrued compensation	$ 7,023	$ 5,527
Customer deposits and deferred revenue	1,926	3,581
Accrued warranty	1,957	1,998
Other	2,818	2,834
	$ 13,724	$ 13,940

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

6. FINANCING ARRANGEMENTS

The Company s existing borrowings under financing arrangements consist of the following (in thousands):

	December 31, 2007	2006
Revolving Line-of-Credit Facilities:		
Euro Overdraft Facilities	$ 135	$ 84
U.S. Line of Credit	11,083	
Japanese Line of Credit		2,519
Total	$ 11,218	$ 2,603
Term Debt:		
U.S. Construction Loan	$	$ 5,589
Subordinated Notes	20,000	20,000
Euro Construction Loan		2,886
Euro Variable Rate Loan		6,267
Other term debt		3,625
Total term debt	20,000	38,367
Less current portion		(8,299)
Long-term debt	$ 20,000	$ 30,068

Revolving Line-of-Credit Facilities:

Euro Overdraft Facilities The Company maintains a syndicated overdraft facility with available principal of Euro 1,873,000 (approximately $2,756,000 at December 31, 2007). This amount is available through September 2008. This facility bears interest at market rates that vary depending upon the bank within the syndicate that advances the principal outstanding (6.95% at December 31, 2007). This facility is collateralized by a common pool of the assets of the Company s German subsidiary, IPG Laser GmbH.

Other European Facilities In October 2007, the Company entered into a new unsecured revolving line of credit with a principal amount of Euro 15,000,000 (approximately $22,078,000 at December 31, 2007). The credit facility bears interest at various rates based upon the type of loan and matures in June 2010.

The Company also maintains two Euro credit lines in Italy with available principal of Euro 650,000 (approximately $957,000 as of December 31, 2007) which bear interest at rates ranging from 6.50% to 6.67%. At December 31, 2007, the remaining availability under the Euro credit lines was $822,000. These facilities are collateralized by a common pool of the assets of the Company s Italian subsidiary, IPG Fibertech S.r.l. (Fibertech). One of these facilities requires

annual renewal, while the other does not have a maturity date.

U.S. Line of Credit The Company maintains an unsecured revolving line of credit with available principal of up to $20,000,000 expiring in July 2010. The line of credit bears interest at a variable rate of LIBOR plus 0.8% to 1.2% depending on the Company s financial performance (6.2% at December 31, 2007). The line of credit also allows for drawdowns by certain subsidiaries. At December 31, 2007, the remaining availability under the U.S. Line of Credit totaled $8,917,000. The Company also has the option to increase the U.S. Line of Credit by $5,000,000 pursuant to certain notice requirements.

Japanese Line of Credit The Company maintains two credit lines with available principal of 100% of eligible receivables, up to JPY 600,000,000 (approximately $5,340,000 at December 31, 2007), on a revolving

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basis. These facilities bear interest of 2.5% at December 31, 2007. The facility is renewable annually and collateralized by accounts receivable and inventory in Japan.

Term Debt:

U.S. Construction Loan Outstanding principal under the U.S. Construction Loan bore interest at a fixed rate of 7.9% and was collateralized by the real estate and building housing the Company s U.S. operations. In January 2007, the Company repaid the U.S. Construction Loan.

Subordinated Notes The Company issued subordinated notes to the holders of its Series B convertible redeemable preferred stock upon conversion of their shares in December 2006. The subordinated notes bear interest at 4.97% in the first year, 7% in the second year and 10% in the third year. The notes mature in December 2009 and may be prepaid without penalty.

Euro Construction Loan The Company maintains a financing agreement with a syndicate of banks used to finance construction of a manufacturing facility in Germany and to meet the working capital needs of the German operation. Principal and interest payments were due semiannually through March 2010. Interest accrued at 5.25%. In January 2007, the Company repaid the Euro Construction Loan.

Euro Variable Rate Loan In September 2006, the Company entered into a Euro-denominated variable rate term loan with total principal of Euro 4,750,000 (approximately $6,266,000 at December 31, 2006). The interest rate was 5.163% at December 31, 2006. In January 2007, the Company repaid the Euro Variable Rate Loan.

Other Term Debt Other term debt consisted principally of Euro-denominated notes payable with fixed and variable rates ranging from 4.2% to 6.5% and various maturities ranging from 2007 to 2019. In January 2007, the Company repaid the Euro-denominated notes.

7. CONVERTIBLE REDEEMABLE PREFERRED STOCK, PREFERRED STOCK AND WARRANTS

Authorized Capital The Company has authorized capital stock consisting of 175,000,000 shares of common stock, par value $0.0001 per share, and 5,000,000 shares of preferred stock, par value $0.0001 per share. There are currently no shares of preferred stock outstanding.

Initial Public Offering The Company received proceeds of $93.2 million, net of expenses, from its issuance and sale of 6,241,379 shares of common stock in December 2006.

Preferred Stock There are no shares of preferred stock outstanding as of December 31, 2007 or 2006. Upon the Company s initial public offering in December 2006, 488,000 outstanding shares of Series A convertible preferred stock (the Series A) converted into 359,463 shares of common stock, 3,800,000 outstanding shares of Series B convertible redeemable preferred stock (the Series B) converted into 7,252,927 shares of common stock and $20.0 million principal amount of subordinated promissory notes, and 2,684,211 outstanding shares of Series D convertible redeemable preferred stock (the Series D) converted into 1,683,168 shares of common stock.

The rights and preferences of the preferred stock prior to their conversion in December 2006 were as follows:

Dividends The holders of the Series A, Series B, and Series D were not entitled to dividends at any fixed rate, but were entitled to receive dividends at the rate paid, if any, on the common shares.

Liquidation In the event of any voluntary or involuntary liquidation or dissolution of the Company, each holder of the Series A, Series B, and Series D was entitled to be paid, before any

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distributions were made to the common stockholders or other junior stockholders, a liquidation preference.

The holders of the Series A, Series B, and Series D were entitled to be paid an amount equal to the preference value of $10.00, $25.00 and $1.90 per share, respectively, plus, in each case, accrued and unpaid dividends. In addition, the holders of the Series B would have participated in further distributions available for the common shares in the amount that would have been payable per share if the Series B had been converted to common shares.

Voting Rights The holders of Series A were not entitled to vote on any matters other than these affecting the rights and preferences of their shares. The holders of the Series B and Series D were entitled to vote on matters with holders of common shares in an amount equal to the number of common shares into which the Series B and Series D were then convertible.

Redemption Prior to their conversion into common stock, the holders of Series B and Series D had redemption rights. The Series B was being accreted to its redemption value through the redemption dates. Accretion totaled $0, $1,994,000 and $2,351,000 for each of the years ended December 31, 2007, 2006 and 2005, respectively.

Conversion The Series A, Series B and Series D were convertible into the number of shares of common stock of the Company determined by dividing their respective preference values by their respective conversion values then in effect. The preference values of the Series A, Series B and Series D were $10.00, $25.00 and $1.90 per share, respectively, and the conversion values at the time of their conversion were $14.27, $33.83 and $3.03 per share, respectively. In December 2005 and January 2006, the conversion rights and obligations of the Series B and Series A, respectively, were amended to modify their automatic conversion right into common shares upon public offerings that met specific conditions.

Upon a public offering meeting certain conditions, all Series A automatically converted into common stock at the lower of the conversion price then in effect or the offering price to the public.

Upon a qualified public offering meeting certain conditions, all Series B automatically converted into subordinated debt and common shares. One of the conditions was that the Company repurchase all of the warrants to purchase its common stock that were granted to the holders of the Series B. In a qualified public offering, the holders of the Series B received consideration equal to the greater of (A) what the holders of the Series B would have received if the Company were sold to a third party using the public offering price to compute the total sale price, which amount would have included the liquidation preference of the Series B plus an additional participation amount, as set forth in the Company s certificate of incorporation, and (B) what the holders of the Series B would have received if it converted upon the public offering at $15.00 per share. The Company s initial public offering in December 2006 met the conditions for a qualified public offering and the holders of the Series B received, upon conversion of their shares, consideration consisting of subordinated three-year notes totaling $20,000,000 in principal amount and the remainder in the form of the Company s common stock valued at $16.50 per share, the offering price to the public.

Because of the anti-dilution provision in the Series A and Series B, as a result of the initial public offering, the Company recorded a deemed dividend related to the beneficial conversion of the Series A and Series B of $63,000 and $18,204,000, respectively. The deemed dividend was recorded to give effect to the additional shares issued to the holders of Series A and Series B.

Warrants In connection with the issuance of the Series B, the Company issued Series B Warrants to purchase, in the aggregate, $47,500,000 of the Company s common stock at an equivalent per-share price of 50% of the fair value on the date of an initial public offering of common stock or the sale, merger or liquidation of the Company. The Company repurchased all of the Series B Warrants in connection with its initial public offering in December 2006 for $22,087,000. The Series B Warrants constituted freestanding

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

derivatives that were accounted for as liabilities at fair value. The Series B Warrants were a binary financial instrument with a fair value of either $23,750,000 if the Series B Warrants were exercised prior to their expiration or zero if the term of the Series B Warrants expired before they were exercised. At each balance sheet date, the fair value of the Series B Warrants was estimated by the Company by assessing the probability that the Series B Warrants would be exercised prior to their expiration. To calculate the estimated fair value, the determined probability percentage was multiplied by the total potential value of the Series B Warrants. A discount relating to the time value of money was applied to the estimated value if the Series B Warrants were not expected to be exercised within twelve months. As freestanding derivative instruments, changes in fair value of the Series B Warrants were recognized in earnings and reported as other income (expense). For the years ended December 31, 2006 and 2005, the fair value of the Series B Warrants increased by $7,443,500 and $745,000, respectively.

Notes Receivable From Issuances of Shares The Company received notes from an individual in connection with this individual s exercise of 126,667 nonqualified stock options in March 2000, as well as the issuance of 166,667 shares of common stock in connection with professional services. This individual later became a member of the Company s Board of Directors. The notes receivable had principal balances of $190,000 and $250,000, accruing interest at 1.68% and 1.52%, respectively, and were collateralized by 326,667 shares of the Company s common stock. The loans were repaid in 2006.

Minority Interests Minority interests reported in the accompanying consolidated financial statements consist of the 20% of Fibertech held by the management of Fibertech; 41.4% of NTO IRE-POLUS, Russia (NTO) held by the company s chief executive officer, certain other Company employees and other parties; 20% of IPG Photonics (Japan) Ltd., Japan (IPG Japan) held by the Company s Japanese distributor; and 10% of IPG Photonics (Korea) (IPG Korea) held by the management of IPG Korea. During 2005, the minority stockholders of IPG Korea and IPG Japan contributed a total of $11,000 in capital in connection with the formation of those companies. During 2007, the minority stockholder of IPG Korea contributed an additional $36,000. Also during 2007, the Company purchased the interests of certain minority stockholders of NTO, who collectively owned 7.6%, for $596,000, which approximated the book value of the minority interests.

8. RELATED-PARTY TRANSACTIONS

At December 31, 2005, the Company s chief executive officer and two members of the Company s Board of Directors owed the Company $5,026,000, $504,811 and $179,000, respectively, under interest-bearing promissory notes. Interest on such loans totaled $49,000 and $83,000 in 2006 and 2005, respectively. These loans and accrued interest were repaid in full in July and August 2006.

Through July 2006, IP Fibre Devices (UK) Ltd. (IPFD), an entity that is controlled by the Company s chief executive officer and other management, provided the Company with a revolving credit facility. At December 31, 2005, the outstanding amount was $4,686,000. Interest expense on the IPFD credit facility totaled $94,000 and $161,000 during 2006 and 2005, respectively. In July 2006, IPFD purchased from the Company s chief executive officer 770,670 shares of the Company s common stock in exchange for $357,000 in cash and $4.6 million in the form of the assignment of the amounts due under the IPFD credit facility. Simultaneously, the Company exchanged with the chief executive officer the note due from him with a remaining principal amount of $5.0 million for $357,000 in cash and $4.6 million in the form of the assignment of amounts due under the IPFD credit facility. Consequently, the IPFD credit facility and the note receivable from the chief executive officer were fully repaid and were no longer outstanding at

December 31, 2006.

From November 2004 to August 2006, the Company s chief executive officer provided a personal guarantee for a U.S. credit facility that has since been repaid. In consideration of the personal guarantee, the Company paid him a guarantee fee equal to the interest on his loan from the Company (with a tax gross-up)

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

while the credit facility was outstanding. The guarantee fee was $71,000 and $136,000 in 2006 and 2005, respectively.

At December 31, 2005, there was a $560,000 note payable to IPFD from NTO. Interest expense, accruing at 4.4% annually, for the years ended December 31, 2006 and 2005, totaled $9,000 and $25,000, respectively, and was included in the carrying value of the note. This note was repaid in full in May 2006.

The Company leases office space from IPFD and reimburses IPFD for general and administrative expenses. The costs related to the lease and services totaled $116,000, $115,000 and $116,000 for 2007, 2006 and 2005, respectively.

In April 2006, a director of one of the Company s existing customers joined the Company s board of directors. Sales to this customer totaled $10,296,000, $10,366,000 and $7,007,000 for 2007, 2006 and 2005, respectively.

The Company paid $252,000, $181,000 and $191,000 to an entity controlled by the father of the Company s chief financial officer in 2007, 2006 and 2005, respectively. The amounts included payments for consulting services, commissions and reimbursement of expenses.

9. NET INCOME PER SHARE

For periods during which the Company had two classes of equity securities issued and outstanding, the Company followed EITF Issue No. 03-6, *Participating Securities and the Two Class Method under FASB Statement No. 128* (EITF 03-6), which established standards regarding the computation of net income per share by companies that have issued securities other than common stock that contractually entitle the holder to participate in dividends and earnings of the company. EITF 03-6 requires earnings available to common stockholders for the period, after deduction of preferred stock accretion and deemed dividends related to beneficial conversion features, to be allocated between the common and convertible securities based on their respective rights to receive dividends. Basic net income per share is then calculated by dividing income applicable to common stockholders by the weighted-average number of shares outstanding. The Company s preferred stock does not participate in losses, and therefore is not included in the computation of net loss per share, as applicable. EITF 03-6 does not require the presentation of basic and diluted net income per share for securities other than common stock; therefore, the following per share amounts only pertain to the Company s common stock.

The Company calculates diluted net income per share under the if-converted method unless the conversion of the convertible preferred stock is dilutive to basic net income per share. To the extent convertible preferred stock is dilutive, the Company calculates diluted net income per share under the two-class method to include the effect of potential common shares.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The share count used to compute basic and diluted net income per share is calculated as follows (in thousands):

	Year Ended December 31,		
	2007	**2006**	**2005**
Weighted-average common shares outstanding used to compute basic net income per share; two classes of equity securities were outstanding prior to December 13, 2006		27,117	26,232
Weighted-average common shares outstanding used to compute basic net income per share after conversion of convertible redeemable preferred stock; one class of equity securities was outstanding as of December 13, 2006	43,269	42,902	
Weighted-average common shares outstanding	43,269	27,896	26,232
Add dilutive common equivalents:			
Stock options	2,480	2,351	
Series A preferred stock			357
Series B preferred stock			
Series D preferred stock		1,665	1,789
Convertible supplier note payable		1,093	1,789
Shares used to compute diluted net income per share	45,749	33,005	30,167

The following is a summary of the securities outstanding that have been excluded from the calculations because the effect on net income per share would have been anti-dilutive (in thousands):

	Year Ended December 31,		
	2007	**2006**	**2005**
Stock options	160		3,920
Series A preferred stock		342	
Series B preferred stock		2,810	2,890
Series D preferred stock			
Convertible supplier note payable			

The Series B Warrants were only exercisable upon the completion of an initial public offering of the Company s common stock or the sale, liquidation, or merger of the Company and, as such, any shares that would have been issued upon the exercise of the Series B Warrants were excluded from the computations of net income per share for all periods presented.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table sets forth the computation of basic and diluted net income per share (in thousands, except per share data):

	Year Ended December 31,		
	2007	**2006**	**2005**
Calculation of basic net income per share:			
Net income for the period during which two classes of equity securities were outstanding		$ 27,790	$ 7,427
Accretion of series B preferred stock		(1,994)	(2,351)
Beneficial conversion feature		(18,267)	
Net income, net of assured stock dividends		$ 7,529	$ 5,076
Percent of net income applicable to common stockholders(1)		85%	84%
Net income applicable to common stockholders		6,435	4,258
Weighted average common shares outstanding		27,117	26,232
Basic net income per share for the period during which two classes of equity securities were outstanding		$ 0.24	$ 0.16
Net income for the period during which a single class of equity securities was outstanding	29,895	1,443	
Weighted average common shares outstanding	43,269	42,902	
Basic net income per share for the period during which a single class of equity securities was outstanding	$ 0.69	$ 0.03	$
Basic net income per share	$ 0.69	$ 0.27	$ 0.16
Calculation of diluted net income per share:			
Net income applicable to common stockholders	$ 29,895	$ 7,877	$ 4,258
Interest expense on convertible supplier note payable		158	247
Net income applicable to dilutive convertible preferred		384	348
Net income	29,895	8,419	4,853
Weighted average diluted shares outstanding	45,749	33,005	30,167
Diluted net income per share	$ 0.65	$ 0.26	$ 0.16

(1) Calculation of percentage of net income applicable to common stockholders

	Year Ended December 31,

	2006	2005
Weighted average common shares outstanding	27,896	26,232
Weighted average dilutive convertible preferred stock	1,665	2,146
Weighted average anti-dilutive convertible preferred stock outstanding	3,079	2,890
Weighted average common shares and preferred shares outstanding	32,640	31,268
Percent of net income applicable to common stockholders	85%	84%
Percent of net income applicable to dilutive convertible preferred stockholders	5%	7%

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. COMMITMENTS AND CONTINGENCIES

Operating Leases The Company leases certain facilities under cancelable and noncancelable operating lease agreements which expire through June 2010. In addition, the Company leases capital equipment under operating leases. Rent expense for the years ended December 31, 2007, 2006 and 2005 totaled $466,000, $383,000 and $570,000, respectively.

Commitments under the noncancelable lease agreements as of December 31, 2007, are as follows (in thousands):

Years Ending December 31	Facilities	Equipment	Total
2008	$ 1,158	$ 1,489	$ 2,647
2009	991	1,325	2,316
2010	668	1,158	1,826
2011	551	1,012	1,563
2012		519	519
2013		354	354
Thereafter		44	44
Total	$ 3,368	$ 5,901	$ 9,269

Employment Agreements The Company has entered into employment agreements with certain members of senior management. The terms of these agreements are up to three years and include noncompete and nondisclosure provisions, as well as provide for defined severance payments in the event of termination.

Contractual Obligations The Company has entered into building agreements related to expansion of its manufacturing facilities. Obligations under these agreements were $10,485,000 as of December 31, 2007.

11. LEGAL PROCEEDINGS

In November 2006, the Company was sued for patent infringement relating to certain unspecified fiber amplifier products. The plaintiff has made a complaint for damages of over $10 million, treble damages for alleged willful infringement and injunctive relief. The case is in the discovery stage, and trial has been set for August 5, 2008. The Company believes it has meritorious defenses and intends to vigorously contest the claims. As such, no amounts have been accrued in respect of this contingency.

In 2007, the Company settled two unrelated lawsuits alleging patent infringement. Neither settlement had a material impact on the Company s financial statements.

In February 2008, the Company was sued for patent infringement relating to two product lines used in medical laser applications. The plaintiff has filed a complaint for unspecified damages, treble damages for alleged willful infringement and injunctive relief. The patent asserted in the lawsuit expired in April 2007. The Company believes it

has meritorious defenses and intends to vigorously contest the claims. As such, no amounts have been accrued in respect to this contingency.

12. EMPLOYEE BENEFIT PLANS

The Company maintains a 401(k) retirement savings plan covering all of its U.S. employees. The Company makes matching contributions equal to 50% of the employee s contributions, subject to a maximum of 6% of eligible compensation. Compensation expense related to the Company s contribution to the plan for the years ended December 31, 2007, 2006 and 2005, approximated $405,000, $321,000 and $263,000, respectively.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. INCOME TAXES

The income before the impact of income taxes and minority interests in consolidated subsidiaries for the years ended December 31, 2007, 2006 and 2005, consisted of the following (in thousands):

	2007	2006	2005
U.S.	$ 18,079	$ 1,307	$ 1,211
Foreign	29,531	26,812	10,722
Total	$ 47,610	$ 28,119	$ 11,933

The Company s (provision for) benefit from income taxes for the years ended December 31, 2007, 2006 and 2005, consisted of the following (in thousands):

	2007	2006	2005
Current:			
U.S.	$ (30)	$ 2,859	$
Foreign	(7,376)	(10,023)	(1,348)
Total current	(7,406)	(7,164)	(1,348)
Deferred:			
Federal	(6,659)	(4,329)	(682)
State	(436)	(290)	(56)
Foreign	(2,178)	(2,902)	(2,992)
Change in valuation allowance	1,157	17,680	998
Total deferred	(8,116)	10,159	(2,732)
(Provision for) benefit from income taxes	$ (15,522)	$ 2,995	$ (4,080)

The (provision for) benefit from income taxes is different from that which would be obtained by applying the statutory federal income tax rate to income before income taxes due to the effects of income taxed at different rates in different jurisdictions, state income taxes, tax credits, various permanent items and changes in the valuation allowance that has been provided against the net operating losses that are not deemed to be recoverable. In 2006, the Company determined that it was more likely than not that a benefit would be realized from the domestic deferred tax assets and released $13,060,000 related to the valuation allowance in addition to a favorable change of $4,620,000 resulting from the use of net operating losses in 2006. The favorable changes to the valuation allowance in 2005 reflect the actual net

operating losses utilized. In 2007, the provision for income taxes was affected by a change in valuation of deferred tax assets and liabilities as a result of a reduction in enacted tax rates in Germany. Additionally, there was a change in certain U.S. deferred tax assets and liabilities as a result of a change in estimated state tax rates.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

A reconciliation of income tax expense at the U.S. federal statutory income tax rate to the recorded tax (provision) benefit for the years ended December 31, 2007, 2006 and 2005, is as follows (in thousands):

	2007	2006	2005
Tax at statutory rate	$ (16,663)	$ (9,560)	$ (4,057)
Non-U.S. rate differential net	7	(1,388)	(658)
State income taxes net	(522)	(121)	(18)
Effect of changes in enacted tax rates on deferred tax assets and liabilities	1,124		
Fair value adjustment to series B warrants		(2,531)	(253)
Nondeductible stock compensation expense	(226)	(76)	
Change in valuation allowance	1,157	17,680	998
Other net	(399)	(1,009)	(92)
	$ (15,522)	$ 2,995	$ (4,080)

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, 2007 and 2006 are as follows (in thousands):

	2007	2006
Property, plant, and equipment	$ (1,089)	$ (518)
Inventory provisions	3,226	2,474
Allowances and accrued liabilities	803	1,031
Other tax credits	2,232	1,132
Deferred compensation	(2,247)	
Net operating loss carryforwards	1,911	10,507
Valuation allowance	(309)	(1,466)
Net deferred tax assets	$ 4,527	$ 13,160

As of December 31, 2007, the Company has U.S. federal and state tax net operating loss carryforwards available for future periods of approximately $19,500,000 and $10,500,000, respectively. The federal and state tax net operating loss carryforwards begin expiring in 2022 and 2008, respectively. Approximately $13,000,000 of the federal net operating loss carryforward when utilized will be credited to paid in capital when realized.

In 2007, the company adopted the provisions of FASB FIN No. 48. The effect of adoption on the results of operations and financial condition of the Company as of and for the year ended December 31, 2007 was not material. As of December 31, 2007, the Company had $865,000 of unrecognized tax benefits. If recognized, all of the Company s unrecognized tax benefits would be recorded as a component of income tax expense. Estimated penalties and interest

related to the underpayment of income taxes are $179,000 for the year ended December 31, 2007 and are included as a component of the provision for income taxes.

The Company s uncertain tax positions are related to tax years that remain subject to examination by the relevant taxing authorities. Open tax years by major jurisdiction are:

United States	2002	2007
Germany	2003	2007
Russia	2005	2007

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IPG PHOTONICS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

We have been notified by German authorities that an examination of years 2003 to 2006 will commence in March 2008. It is not expected that the outcome of this examination will have a material change in unrecognized tax benefits.

14. GEOGRAPHIC AND PRODUCT INFORMATION

The Company markets and sells its products throughout the world through both direct sales and distribution channels. The geographic sources of the Company s net sales, based on billing addresses of the Company s customers, for the years ended December 31, 2007, 2006 and 2005 are as follows (in thousands):

	Year Ended December 31,		
	2007	2006	2005
United States and other North America	$ 53,272	$ 45,519	$ 38,512
Europe:			
Germany	33,450	24,454	13,137
Other including Eastern Europe/CIS	39,345	24,037	10,745
Asia and Australia:			
Japan	32,894	35,585	25,354
Other	29,670	13,184	8,215
Rest of the World	46	446	422
Total	$ 188,677	$ 143,225	$ 96,385

Sales are derived from products for different applications: fiber lasers and diode lasers for materials processing, fiber lasers and amplifiers for advanced applications, fiber amplifiers for communications applications, and fiber lasers for medical applications. Net sales for the years ended December 31, 2007, 2006 and 2005 for these product lines are as follows (in thousands):

	Year Ended December 31,		
	2007	2006	2005
Materials processing	$ 140,044	$ 97,600	$ 59,659
Advanced applications	25,047	19,224	13,656
Communications	13,062	15,222	15,751
Medical	10,524	11,179	7,319
Total	$ 188,677	$ 143,225	$ 96,385

The Company had one customer that individually comprised 7%, 10% and 13% of net sales during the years ended December 31, 2007, 2006 and 2005, respectively. Accounts receivable related to this customer totaled approximately

7% and 10% of the net accounts receivable balance as of December 31, 2007 and 2006, respectively.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The geographic locations of the Company s long-lived assets, based on physical location of the assets, as of December 31, 2007 and 2006, are as follows (in thousands):

	December 31, 2007	2006
United States	$ 44,560	$ 32,798
Germany	41,112	30,108
Russia	5,988	3,183
China	3,712	
Other	998	1,064
	$ 96,370	$ 67,153

15. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

2007	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In thousands, except per share data)			
Net sales	$ 41,753	$ 43,952	$ 47,905	$ 55,067
Gross profit	19,331	20,319	21,705	23,627
Net income applicable to common stockholders	6,613	6,388	8,557	8,337
Basic earnings per share applicable to common stockholders	0.15	0.15	0.20	0.19
Diluted earnings per share applicable to common stockholders	0.15	0.14	0.19	0.18

2006	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In thousands, except per share data)			
Net sales	$ 32,743	$ 32,184	$ 36,201	$ 42,097
Gross profit	12,465	13,343	17,337	20,149
Net income (loss) applicable to common stockholders, two-class method	2,174	3,637	3,624	(5,326)(1)
Net income for period during which a single class of equity securities was outstanding				3,255(1)(2)
Basic earnings per share, two-class method	0.08	0.13	0.13	(0.19)(1)
				0.08(1)(2)

Basic earnings per share for period during which a single class of equity securities was outstanding				
Basic earnings per share applicable to common stockholders	0.08	0.13	0.13	(0.11)(1)(2)
Diluted earnings per share applicable to common stockholders	0.07	0.12	0.12	(0.11)(1)(2)

(1) Includes a $3.1 million charge related to the change in the fair value of the Company s series B warrants and a $13.1 million benefit related to the release of a deferred tax valuation allowance in the fourth quarter of 2006.

(2) Includes a one-time deemed dividend of $18.3 million related to the beneficial conversion of preferred stock in the Company s initial public offering in 2006 and accretion relating to preferred stock.

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EXHIBIT INDEX

Exhibit Number	Description
3.1	Form of Second Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.2 to Registration Statement No. 333-136521 filed with the Securities and Exchange Commission (the Commission) on August 11, 2006)
3.2	Form of Certificate of Amendment of Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.4 to Registration Statement No. 333-136521 filed with the Commission on November 24, 2006)
3.3	Amended and Restated By-laws of the Registrant (incorporated by reference to Exhibit 3.3 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
4.1	Specimen Stock Certificate (incorporated by reference to Exhibit 4.1 to Registration Statement No. 333-136521 filed with the Commission on November 14, 2006)
4.2	Registration Rights Agreement by and among the Registrant and the Investors named therein, dated as of August 30, 2000, as amended (incorporated by reference to Exhibit 4.2 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.1	2000 Incentive Compensation Plan (incorporated by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)
10.2	2006 Incentive Compensation Plan (incorporated by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)
10.3	Non-Employee Directors Compensation Plan (incorporated by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)
10.4	Non-Employee Directors Stock Plan (incorporated by reference to Exhibit 10.4 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)
10.5	Senior Executive Short-Term Incentive Plan (incorporated by reference to Exhibit 10.5 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.6	Form of Subordinated Note of the Registrant to be issued to holders of series B preferred stock (incorporated by reference to Exhibit 10.6 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.7	Employment Agreement by and between the Registrant and Valentin P. Gapontsev, dated as of March 1, 2006 (incorporated by reference to Exhibit 10.8 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.8	Service Agreement by and between the Registrant and Eugene Shcherbakov, dated as of March 1, 2006 (incorporated by reference to Exhibit 10.9 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.9	Employment Agreement by and between the Registrant and Tim Mammen, dated as of March 1, 2006 (incorporated by reference to Exhibit 10.10 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.10	Employment Agreement by and between the Registrant and Angelo P. Lopresti, dated as of March 1, 2006 (incorporated by reference to Exhibit 10.11 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.11	Employment Agreement by and between the Registrant and Denis Gapontsev, dated as of March 1, 2006 (incorporated by reference to Exhibit 10.12 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)

10.12	Form of Indemnification Agreement between the Registrant and each of its Directors and Executive Officers (incorporated by reference to Exhibit 10.13 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.13	Form of Stock Option Agreement under the 2000 Incentive Compensation Plan (incorporated by reference to Exhibit 10.5 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)
10.14	Form of Stock Option Agreement under the 2006 Incentive Compensation Plan (incorporated by reference to Exhibit 10.6 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)

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Exhibit Number	Description
10.15	Form of Stock Option Agreement under the 2006 Non-Employee Directors Stock Plan (incorporated by reference to Exhibit 10.7 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)
10.16	Form of Confidentiality, Non-Competition and Confirmatory Assignment Agreement (incorporated by reference to Exhibit 10.16 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.17	Assignment, Research and Development Agreement between the Registrant, IPG Laser GmbH, IPG Fibertech S.R.L. and NTO IRE-Polus, dated as of August 30, 2000 (incorporated by reference to Exhibit 10.21 to Registration Statement No. 333-136521 filed with the Commission on September 27, 2006)
10.18	Investment Agreement between NTO IRE-Polus and IPG Laser GmbH, dated as of March 1, 2001 (incorporated by reference to Exhibit 10.22 to Registration Statement No. 333-136521 filed with the Commission on September 27, 2006)
10.19	Guaranty of Valentin P. Gapontsev, dated as of August 9, 2006 (incorporated by reference to Exhibit 10.27 to Registration Statement No. 333-136521 filed with the Commission on September 27, 2006)
10.20	Stock Purchase Agreement between the Registrant and the Investors named therein, dated as of August 30, 2000 (incorporated by reference to Exhibit 10.28 to Registration Statement No. 333-136521 filed with the Commission on September 27, 2006)
10.21	Exchange Agreement between the Registrant and Valentin P. Gapontsev, dated as of July 31, 2006 (incorporated by reference to Exhibit 10.30 to Registration Statement No. 333-136521 filed with the Commission on September 27, 2006)
10.22	Stockholders Agreement by and among the Registrant, the Founders named therein and the Investors named therein, dated as of August 30, 2000, as amended (incorporated by reference to Exhibit 10.43 to Registration Statement No. 333-136521 filed with the Commission on October 18, 2006)
10.23	Sublease Agreement between IP Fibre Devices (UK) Ltd. and IPG Photonics (UK) Ltd., dated October 31, 2006 (incorporated by reference to Exhibit 10.45 to Registration Statement No. 333-136521 filed with the Commission on November 14, 2006)
10.24	Right of First Offer Agreement between IPG Laser GmbH and Dr. Valentin P. Gapontsev, dated November 1, 2006 (incorporated by reference to Exhibit 10.46 to Registration Statement No. 333-136521 filed with the Commission on November 14, 2006)
10.25	Right of First Offer Agreement between IPG Laser GmbH and Igor Samartsev, dated November 1, 2006 (incorporated by reference to Exhibit 10.47 to Registration Statement No. 333-136521 filed with the Commission on November 14, 2006)
10.26	Loan Agreement between the Registrant and Bank of America, N.A. dated as of July 26, 2007 (incorporated by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on August 13, 2007)
10.27	Revolving Credit Note by the Registrant dated July 26, 2007 (incorporated by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on August 13, 2007)
10.28	Credit Facility Agreement between IPG Laser GmbH and Deutsche Bank AG dated October 10, 2007 (incorporated by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on November 8, 2007)
10.29	Guarantee of the Registrant dated October 10, 2007 (incorporated by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q filed with the Commission on November 8, 2007)
21.1	List of Subsidiaries

23.1	Consent of Deloitte & Touche LLP
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 1350