FORM S-1 · REGISTRATION STATEMENT

IPG Photonics Corp

IPO priced 2006-12-13 · $16.50 a share · IPGP



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AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON DECEMBER , 2000 REGISTRATION NO. 333-XXXX UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 FORM S-1 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933 IPG PHOTONICS CORPORATION (EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

Delaware	3674	04-3444218
(State of other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

P.O. BOX 519 660 MAIN STREET STURBRIDGE, MASSACHUSETTS 01566 (508) 347-6800 (ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES) DR. VALENTIN P. GAPONTSEV CHAIRMAN OF THE BOARD AND CHIEF EXECUTIVE OFFICER P.O. BOX 519 660 MAIN STREET STURBRIDGE, MASSACHUSETTS 01566 (508) 347-6800 (NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF AGENT FOR SERVICE) PLEASE SEND COPIES OF ALL COMMUNICATIONS TO:

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: AS SOON AS PRACTICABLE AFTER THE EFFECTIVE DATE OF THIS REGISTRATION STATEMENT.

IF ANY OF THE SECURITIES BEING REGISTERED ON THIS FORM ARE TO BE OFFERED ON A DELAYED OR CONTINUOUS BASIS PURSUANT TO RULE 415 UNDER THE SECURITIES ACT OF 1933, PLEASE CHECK THE FOLLOWING BOX. [_] IF THIS FORM IS FILED TO REGISTER ADDITIONAL SECURITIES FOR AN OFFERING PURSUANT TO RULE 462(B) UNDER THE SECURITIES ACT, PLEASE CHECK THE FOLLOWING BOX AND LIST THE SECURITIES ACT REGISTRATION NUMBER OF THE EARLIER EFFECTIVE REGISTRATION STATEMENT FOR THE SAME OFFERING. [_] IF THIS FORM IS A POST-EFFECTIVE AMENDMENT FILED PURSUANT TO RULE 462(C) UNDER THE SECURITIES ACT, CHECK THE FOLLOWING BOX AND LIST THE SECURITIES ACT REGISTRATION NUMBER OF THE EARLIER EFFECTIVE REGISTRATION STATEMENT FOR THE SAME OFFERING: [_] IF THIS FORM IS A POST-EFFECTIVE AMENDMENT FILED PURSUANT TO RULE 462(D) UNDER THE SECURITIES ACT, CHECK THE FOLLOWING BOX AND LIST THE SECURITIES ACT REGISTRATION NUMBER OF THE EARLIER EFFECTIVE REGISTRATION STATEMENT FOR THE SAME OFFERING. [_] IF DELIVERY OF THE PROSPECTUS IS EXPECTED TO BE MADE PURSUANT TO RULE 434, PLEASE CHECK THE FOLLOWING BOX. [_]

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
COMMON STOCK, $0.0001 PAR VALUE.....	$150,000,000	$39,600

(1) ESTIMATED SOLELY FOR THE PURPOSE FOR COMPUTING THE AMOUNT OF REGISTRATION FEE PURSUANT TO RULE 457(O) UNDER THE SECURITIES ACT.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS PROSPECTUS SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THIS REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

++ +THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY + +NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE + +SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN + +OFFER TO SELL THESE

SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE + +SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED. +

++

SUBJECT TO COMPLETION PRELIMINARY PROSPECTUS DATED DECEMBER 8, 2000 PROSPECTUS SHARES

[IPG LOGO] COMMON STOCK

This is IPG Photonics Corporation's initial public offering of common stock. IPG Photonics Corporation is selling all of the shares. The U.S. underwriters are offering shares in the U.S. and Canada and the international managers are offering shares outside the U.S. and Canada.

WE EXPECT THE PUBLIC OFFERING PRICE TO BE BETWEEN $ AND $ PER SHARE. CURRENTLY, NO PUBLIC MARKET EXISTS FOR THE SHARES. AFTER PRICING OF THIS OFFERING, WE EXPECT THAT THE COMMON STOCK WILL TRADE ON THE NASDAQ NATIONAL MARKET UNDER THE SYMBOL "IPGP."

INVESTING IN THE COMMON STOCK INVOLVES RISKS THAT ARE DESCRIBED IN THE "RISK FACTORS" SECTION BEGINNING ON PAGE 6 OF THIS PROSPECTUS.

	PER SHARE	TOTAL
Public offering price	$	$
Underwriting discount	$	$
Proceeds, before expenses, to IPG Photonics	$	$

The U.S. underwriters may also purchase up to an additional shares from us at the public offering price, less the underwriting discount, within 30 days from the date of this prospectus to cover over-allotments. The international managers may similarly purchase up to an additional shares from us.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

THE SHARES WILL BE READY FOR DELIVERY IN NEW YORK, NEW YORK ON OR ABOUT , 2001.

MERRILL LYNCH & CO. ROBERTSON STEPHENS CIBC WORLD MARKETS U.S. BANCORP PIPER JAFFRAY WIT SOUNDVIEW THE DATE OF THIS PROSPECTUS IS , 2001.

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Unless specifically stated, the information in this prospectus:

. reflects the automatic conversion of all outstanding shares of our Series A convertible preferred stock and Series B convertible redeemable preferred stock into an aggregate of 4,300,000 shares of our common stock upon the closing of this offering;

. reflects our acquisition of 51% of the ownership interest in NTO IRE- POLUS;

. reflects the acquisition of all of the remaining shares of IPG Laser GmbH by us on October 4, 2000; and . assumes no exercise of the underwriters' overallotment option.

You should rely only on the information contained in this prospectus. Neither we nor the underwriters have authorized any person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We and the underwriters are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate as of the date on the front cover of this prospectus only. Our business, financial condition, results of operations and prospects may have changed since that date.

IPG is a trademark of IPG Photonics Corporation. This prospectus contains product names, trade names and trademarks of IPG and other organizations.

Prospectus Summary

The summary highlights selected information contained elsewhere in this prospectus. Because this is only a summary, it does not contain all the information that you should consider before buying shares in this offering. You should read the entire prospectus carefully, including our consolidated financial statements and the related notes included elsewhere in this prospectus.

IPG Photonics Corporation We design, manufacture and sell high performance fiber amplifiers, Raman pump lasers and fiber lasers for telecommunications and industrial applications. Our proprietary technology, materials science expertise and vertically integrated manufacturing operations enable us to produce cost- effective, high and low power fiber amplifiers and lasers with substantial power efficiency, improved signal to noise performance, reliability and quality that operate over a wider range of the usable optical spectrum. Our telecommunications products are used in the long-haul, metropolitan and access segments of optical communications networks. Our telecommunications customers include ADC, Agilent, Alcatel, Calient, Corning, Corvis, Hughes Space and Communications, JDS Uniphase, Lucent, Marconi, MIT Lincoln Labs, Nortel, Optical Crossing, Siemens. and TeraBeam Networks. Our industrial products are used for marking, printing, materials processing, micro-machining, optical sensing and measurement, and laboratory and medical equipment. Our industrial customers include Antares Laser, Baasel Scheel Lasergraphics, DaimlerChrysler Aerospace, GSI Lumonics, L.O.T. Oriel, Molecular OptoElectronics, Purup Escofot and Sunx.

Due to rapidly increasing worldwide levels of data, voice and video traffic, telecommunications service providers are expanding their use of fiber optic technologies and seeking to increase the transmission capacity, or bandwidth, of existing fiber networks. Telecommunications service providers first deployed optical communication technology in the long-haul segment, and are now also deploying new fiber optic technologies in the metropolitan and access segments. In each of these segments, the distance that an optical signal can be transmitted is limited by losses in signal strength, or attenuation, caused by absorption and scattering of light in the fiber, as well as by losses to the signal as it passes through optical components in the network, or insertion loss. Prior to the invention of the fiber amplifier, amplification of optical signals could only be accomplished using relatively expensive and inefficient opto-electronic regenerators. Because fiber amplifiers cost- effectively address attenuation and insertion loss, they have contributed significantly to the deployment of optical communications networks.

Fiber optic amplification is commonly achieved through the use of erbium- doped fiber amplifiers, or EDFAs, and Raman pump lasers. EDFAs contain optical fiber that is mixed, or doped, in the manufacturing process with traces of rare earth elements to improve the amplification properties of the fiber. Ryan, Hankin & Kent, or RHK, a leading market research and consulting firm, estimates that revenue from the sale of erbium gain modules, the component of EDFAs in which amplification is achieved, was $641 million in 1999 and will increase to $4.2 billion in 2004, representing a compound annual growth rate of 45.3%. Raman pump lasers are used to turn the transmission fiber itself into an amplifier, a process known as Raman amplification. By amplifying throughout the transmission fiber rather than boosting the signal at one point, Raman amplification results in greater signal integrity. RHK estimates that sales of Raman gain modules will grow from approximately $18.0 million in 2000 to approximately $1.0 billion in 2004, representing a compound annual growth rate of 173.1%.

Our innovative line of customized high and low power amplifiers is designed to meet the specific needs of our telecommunications customers. These products enable the cost-effective deployment of optical communications systems, reducing bottlenecks and increasing bandwidth within each segment of communications networks. For example:

. In the long-haul segment, our fiber amplifiers provide the high power needed for bandwidth-enhancing technologies, such as dense wavelength division multiplexing, or DWDM, by which multiple wavelengths of optical signals are transmitted simultaneously through the same fiber.

. In the access segment, our high power, multiple output fiber amplifiers enable fiber-to-the-curb applications and hybrid cable television networks with many end users.

. In free-space (wireless) optical networks, a subsegment of the access segment, our high power amplifiers automatically adjust power output over a wide dynamic range to overcome atmospheric limitations, such as fog and rain.

. In the metropolitan segment, our low and medium power fiber amplifiers can be widely deployed because of their cost-effectiveness and high reliability.

In addition to telecommunications products, we also provide high power fiber lasers for a variety of industrial applications. Industrial lasers enable manufacturers to cut, mark and measure without physical contact which, in many applications, allows for higher processing speeds. Most industrial lasers in use today are gas or solid state. Our high power fiber lasers offer several benefits compared to these traditional laser technologies, such as higher beam quality and mobility, increased reliability and efficiency, reduced size, maintenance-free operation and lower operating costs.

Our state-of-the-art products are based on our innovative proprietary technology platform. This platform is supported by a team of more than 30 Ph.D.'s over a wide range of disciplines. We have developed a fiber amplification technology that allows us to efficiently use a greater number of diodes in our fiber amplifiers, thereby producing higher output power than achievable through traditional techniques. A key element of this technology is our ability to pump our proprietary single mode fibers with multimode diodes. Our expertise in materials science is the basis for our manufacturing expertise of the specialty fibers we use in our fiber amplifiers and fiber lasers. We believe these proprietary fibers allow us to create fiber amplifiers that can operate over a broader range of the usable optical spectrum than those offered by our competitors. In addition, our simplified product design decreases the number of components used, allowing for a more flexible and cost-effective manufacturing platform.

Our vertically integrated manufacturing operations allow us to better meet the needs of our telecommunications and industrial customers. We design and manufacture a significant majority of the critical specialty components used in our products. We also test and qualify all of our components and assemblies, as well as our finished products, to assure reliability and performance. Our vertical integration enables us to quickly scale our production and maintain high product quality and reliability. We perform our manufacturing, assembly and testing at our facilities in the United States, Germany and Italy, as well as at our affiliate in Russia, and are currently expanding our manufacturing capacity significantly.

Our objective is to be the leading supplier of fiber amplifiers, Raman pump lasers and fiber lasers to developers of optical communications and industrial laser systems. Key elements of our strategy include:

. extending our existing technology leadership;

. expanding and enhancing our existing line of products;

. expanding our manufacturing capacity and reducing costs;

. expanding our sales and marketing efforts;

. providing our customers with a high degree of technical and engineering support for customization; and . acquiring strategic businesses and technologies consistent with our growth strategies.

Corporate Information Our main office is located at 660 Main Street, Sturbridge, Massachusetts 01566 and our telephone number is (508) 347-6800.

The Offering

Common stock offered by IPG Photonics..... shares Common stock to be outstanding after this offering..... shares Use of proceeds..... For expansion of manufacturing facilities, marketing and distribution activities, research and development activities and repayment of a portion of outstanding indebtedness, working capital and other general corporate purposes, including acquisitions.

Proposed Nasdaq National Market symbol..... IPGP The number of shares that will be outstanding after this offering is based on the number of shares outstanding as of September 30, 2000 and excludes:

. 2,377,766 shares of common stock issuable upon exercise of options outstanding at September 30, 2000 under our 2000 stock incentive plan, with a weighted-average exercise price of $1.14 per share, 1,352,000 shares issuable upon exercise of options granted subsequent to September 30, 2000 with a weighted-average exercise price of $4.14 per share;

. 100,000 shares of common stock issuable upon exercise of non-plan stock options outstanding at September 30, 2000 with a weighted- average exercise price of $1.00;

. 500,000 shares of restricted common stock issued under our 2000 stock incentive plan subsequent to September 30, 2000, at a price of $1.00 per share;

. 2,939,300 shares reserved for issuance under our 2000 stock incentive plan as of November 30, 2000; and

. shares of common stock issuable upon exercise of warrants outstanding at September 30, 2000 held by owners of our Series B convertible redeemable preferred stock, assuming an exercise price of $.

Summary Combined Consolidated Financial Data You should read the following Summary Combined Consolidated Financial Data in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our combined consolidated financial statements and the related notes included elsewhere in this prospectus.

The following table sets forth our summary financial and operating data for the periods indicated on the basis described in "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained elsewhere herein. Our combined consolidated financial statements include the accounts of NTO IRE-POLUS, IPG Laser GmbH and IPG Fibertech S.r.l. The summary combined consolidated financial data for each of the three years in the period ended December 31, 1999 are derived from our combined consolidated financial statements included elsewhere in this prospectus, which have been audited by independent auditors. The summary combined consolidated financial data as of September 30, 2000 and for the nine months ended September 30, 1999 and 2000 are derived from our unaudited combined consolidated financial statements included elsewhere in this prospectus. The data for pro forma net income per share treats our outstanding preferred stock as though it were common stock from the date of original issuance. Our results of operations for the nine month period ended September 30, 2000 are not necessarily indicative of our results for the full fiscal year ended

December 31, 2000. For purposes of presentation of our summary combined consolidated financial statements for the years ended December 31, 1997 and 1998, NTO IRE-POLUS, IPG Laser and IPG Laser's 80% owned subsidiary, IPG Fibertech, are referred to as the Predecessor.

	For the year ended December 31,			For the nine months ended September 30,	
	1997	1998	1999	1999	2000
	(in thousands, except per share data)				
	Predecessor				
Statement of Operations Data:					
Net sales	$3,124	$8,289	$18,637	$14,831	$32,512
Cost of sales (1)	2,065	5,327	9,307	6,795	11,055
Gross profit (1)	1,059	2,962	9,330	8,036	21,457
Operating expenses:					
Sales and marketing (2)	219	374	677	619	1,049
Research and development (3)	312	840	1,695	1,190	1,610
General, administrative and other (4)	322	1,040	2,766	2,046	4,066
Equity-based compensation	--	--	--	--	8,719
Total operating expenses	853	2,254	5,138	3,855	15,444
Operating income	206	708	4,192	4,181	6,013
Interest income (expense), net	(118)	(208)	(303)	(231)	(77)
Other income (expense), net	(14)	38	126	(42)	401
Income before provision for income taxes and minority interests	74	538	4,015	3,908	6,337
Provision for income taxes	31	234	2,206	2,232	4,639
Minority interests in (income) loss of less than 100% owned companies	(19)	(77)	69	113	(242)
Net income	24	227	1,878	1,789	1,456
Accretion of preferred stock	--	--	--	--	(169)
Net income available to common shareholders	$ 24	$ 227	$ 1,878	$ 1,789	1,287
Net income per share: (5)					
Basic	--	--	$ 0.05	$ 0.05	$ 0.04
Diluted	--	--	$ 0.05	$ 0.05	$ 0.04
Pro forma net income per share: (5)					
Basic	--	--	--	--	$0.04
Diluted	--	--	--	--	$0.04

(1) Excludes $677 of equity-based compensation for the nine months ended September 30, 2000. (2) Excludes $166 of equity-based compensation for the nine months ended September 30, 2000. (3) Excludes $184 of equity-based compensation for the nine months ended September 30, 2000. (4) Excludes $7,692 of equity-based compensation for the nine months ended September 30, 2000. (5) The calculation of net income per share and pro forma basic and diluted net income per share is described in Note 3 to the combined consolidated financial statements.

	September 30, 2000		
	Pro Forma	Actual Pro Forma (6)	As Adjusted (7)
	(in thousands)		
Balance Sheet Data:			
Cash and cash equivalents	$65,814	$ 85,814	
Working capital	71,779	91,779	
Total assets	103,446	123,446	
Long-term debt, including current portion	7,299	7,299	
Series B preferred stock	62,389	--	

Series A preferred stock	4,954	--
Stockholders' equity	20,171	102,514

(6) The pro forma amounts give effect to (i) the issuance of an additional 800,000 shares of Series B preferred stock at $25.00 per share subsequent to September 30, 2000, (ii) the issuance of 1,403,000 shares of our common stock in connection with the acquisition of the remaining ownership of IPG Laser in October 2000, (iii) the issuance subsequent to September 30, 2000 of 500,000 common shares for a note receivable for $500,000 and options to purchase 1,000,000 common shares at a price of $3.00, reflecting a compensation charge of $12.0 million and deferred compensation charge of $22.0 million, (iv) the issuance of options to purchase 352,000 common shares at a weighted-average exercise price of $7.39 per share to employees and members of the Board of Directors, reflecting a deferred compensation charge of $6.2 million, (v) conversion of all outstanding shares of Series A preferred stock into 500,000 shares of common stock and (vi) conversion of all outstanding shares of Series B preferred stock into 3,800,000 shares of common stock. (7) The pro forma as adjusted amounts reflect pro forma amounts, as adjusted to reflect (i) the payment of a portion of outstanding indebtedness from the proceeds of this offering, and (ii) to reflect the sale of shares of our common stock in this offering, at an assumed initial public offering price of $ per share and after deducting the estimated underwriting discount and estimated offering expenses, and our receipt of the net proceeds. For more information, see "Use of Proceeds" and "Capitalization."

Risk Factors

You should carefully consider the risk factors set forth below, in addition to the other information contained in this prospectus, before making an investment decision. If any of the following risks actually occur, our business could be harmed, the trading price of our common stock could decline and you may lose all or part of your investment. You should also refer to the other information contained in this prospectus, including our financial statements and the related notes.

Risks Related to Our Business We depend on a few key customers for a substantial portion of our sales revenue and the loss of any of these customers or a significant reduction or fluctuation in sales to these customers could significantly reduce our sales revenue or cause our results of operations to fluctuate.

Our results of operations have historically depended, and we anticipate will continue to depend for the foreseeable future, on sales to a relatively small number of customers. In the nine-month period ended September 30, 2000, TeraBeam and Marconi accounted for 40.2% and 19.6% of our net sales revenue, respectively, with eight customers accounting for 86% of our net sales revenue. Our net sales revenue generated from these customers, individually or in the aggregate, may not reach or exceed historic levels in any future period. Our net sales are dependent in part upon the ability of our customers to develop and sell systems that incorporate our fiber amplifiers, Raman pump lasers and fiber lasers. Adverse economic conditions, large inventory positions, limited marketing resources and other factors affecting these customers could have a substantial impact upon our financial results. In addition, our customers tend to order large quantities of products on an as needed basis. These ordering patterns may result in significant quarterly fluctuations in our net sales revenue and results of operations. None

of our current customers have any minimum purchase obligations, and may stop placing orders with us at any time. Our customers may purchase, and in several cases have purchased, fiber amplifiers and fiber lasers from other vendors, regardless of any forecast they may have previously provided to us. Loss or cancellations of orders from, or any downturn in the business of, any of these significant customers could cause a reduction in our sales revenue. In addition, we may not be able to reduce our dependence on a limited number of customers if the trend toward consolidation within various segments of the communications industry continues.

A significant portion of our sales are to a customer seeking to develop a free- space optical telecommunications business. If this customer's business does not develop as planned, our business, results of operations and financial condition will be materially adversely affected.

TeraBeam has developed a free-space optical telecommunications system to transmit data from building to building at high speeds without the use of copper or fiber optic cables. We understand that TeraBeam plans to introduce this system in metropolitan areas in the coming years. Free-space optical telecommunications systems are relatively new. We cannot assure you that these systems will be completed or adopted. Finally, as a private company, TeraBeam does not publish financial statements or other reports of the type required of companies whose securities are publicly traded. Consequently, we cannot make any statements about TeraBeam's financial condition or resources.

Our business could be negatively affected if we lose members of our senior management team or if these members are unable to work together effectively.

Our future success depends upon the continued services of members of our senior management, particularly Dr. Valentin P. Gapontsev, our founder, Chairman of the Board and Chief Executive Officer. The loss of Dr. Gapontsev could hurt our business and we do not have "key person" life insurance policies covering Dr. Gapontsev or any of our other employees. We are currently seeking to obtain a "key person" life insurance policy for Dr. Gapontsev as well as other key employees. With the exception of John H. Dalton and John Geagea, none of our executive officers or key employees are bound by an employment agreement for any specific term and these individuals may terminate their employment at any time. In addition, many of the members of our management team have been with us only for a relatively short period of time. For example, John H. Dalton, our President, joined us in September 2000 and John Geagea, our Chief Operating Officer, joined us in June 2000.

If we do not successfully expand our sales and marketing organization, our sales revenue may not increase.

The sale of our products requires long and sustained efforts targeted at several key departments within our customers' and prospective customers' organizations. Our sales organization is currently limited and relies substantially upon our senior management, scientists and engineers. We will need to grow our sales force in order to increase market awareness and sales of our products. Competition for these individuals is intense, and we might not be able to hire the kind and number of sales personnel and applications engineers we need.

If we cannot reduce our manufacturing costs and introduce higher margin products to offset anticipated continued reductions in the average selling price of our products, our results of operations will suffer.

We anticipate that average selling prices of fiber optic communications products will continue to decrease in the future in response to technological advances, to product introductions by competitors and by us, and to other factors, including price pressures from significant customers. We cannot predict the rate at which selling prices will decrease. Therefore, we must continue to develop and introduce new products that incorporate features that can be sold at higher prices and reduce our manufacturing costs.

Our dependence on single or limited source suppliers for some of our key components and raw materials could adversely affect our results of operations.

We currently purchase some of our key components and raw materials used in the manufacture of our products from single or limited source suppliers and we have no contractual supply arrangements with any supplier other than SDL, our single source supplier of laser diode chips. SDL is one of our competitors and has recently announced its decision to merge with JDS Uniphase. Although we are actively seeking alternative sources of supply for the key components that we obtain from single or limited source suppliers, we do not anticipate supplies being available from other sources in commercial quantities in the near future. Financial or other difficulties faced by our suppliers or significant changes in demand for the components and materials we obtain from them could limit the availability of these components and materials. 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 would impair our ability to meet scheduled product deliveries to our customers and could cause customers to cancel orders. We currently manufacture many of our critical components and will attempt to manufacture more of them to reduce our dependence on single or limited source suppliers, but we cannot assure you that we will succeed at these efforts in a timely manner or at all.

If we are unable to expand our manufacturing capacity in a timely manner, we will have insufficient capacity, which could adversely affect our business, results of operations and financial condition.

We are currently establishing additional manufacturing and research facilities in Oxford, Massachusetts and Burbach, Germany and plan to add additional capacity in Milan, Italy and Friazino, Russia. During this process, we could face the inability to procure and install the necessary capital equipment, a lack of availability of manufacturing personnel to work in our existing or new facilities and difficulties in achieving adequate yields from new manufacturing lines. We could also experience delays, disruptions, capacity constraints or quality control problems in our existing or new manufacturing operations. If we experience difficulties and disruptions in the manufacture of our products, we may not be able to deliver our products in a timely manner, which could cause us to lose customers or make it more difficult to attract new customers and negatively impact our sales revenue, competitive position and reputation. An element of our manufacturing strategy is increasing use of automation in our manufacturing and assembly processes. We cannot assure you that we will be able to

successfully increase our use of automation. In addition, if we outgrow our existing and new facilities in Massachusetts, Germany, Italy and Russia, we will need to locate and obtain additional space. The commercial real estate markets in Massachusetts and Germany are extremely competitive and we may not be able to obtain additional needed space on reasonable terms, or at all. Our failure to obtain additional space could adversely impact our ability to expand our business and operations and increase our sales revenue.

If we do not achieve acceptable manufacturing costs or sufficient product reliability in our expanded facilities or we suffer any interruption in our manufacturing operations, our ability to compete may be impaired and our results of operations could suffer.

The manufacture of our products involves complex and precise processes, requiring production in highly controlled clean room environments. Changes in our manufacturing processes or those of our suppliers, or inadvertent use of defective or contaminated materials by our suppliers or us, could significantly reduce our manufacturing yields and product reliability. Our manufacturing costs are relatively fixed and, thus, manufacturing yields are critical to our results of operations. To the extent we do not achieve acceptable manufacturing yields or experience product shipment delays, our business, results of operations and financial condition would be materially and adversely affected. In addition, we may experience manufacturing delays and reduced manufacturing yields upon introducing new products. Furthermore, any interruption in manufacturing resulting from shortages of parts or equipment, earthquake, fire, equipment failures, yield fluctuations or otherwise could have a material adverse effect on our business and results of operations.

If we fail to predict our manufacturing requirements accurately, we could incur additional costs or experience manufacturing delays, which could cause us to lose orders or customers and result in lower revenues.

We need to accurately predict both the demand for our products and the lead time required to manufacture and obtain the raw materials and components for manufacturing our products. Lead times for raw materials and components that we order vary significantly and depend on factors such as the size of the order, contract terms and market demand for the raw materials or components. We currently use historical pricing, analytical reports and industry trend analysis to determine our requirements for components and raw materials. If we underestimate our requirements, our company may have inadequate manufacturing capacity or inventory, which could interrupt manufacturing of our products and result in delays in shipments and revenues. If we overestimate our requirements, we could have excess inventory.

If fiber optic technology is adopted at rates slower than we expect, particularly in the metropolitan and access segments, then we may have to significantly revise our strategy and our business, results of operations and financial condition could be materially harmed.

We have based a significant element of our strategy on expanded use of fiber optic technology in the metropolitan and access segments as a means of satisfying the increasing demand for bandwidth across communications networks, including the demand for higher transmission rates related to Internet-based communications. While we believe that both economic and technological factors favor the use of

fiber optic communications systems over traditional copper wire-based systems, enhancements to copper wire-based technology, such as digital subscriber line, or DSL, could delay or prevent the adoption of fiber optic technology. Consequently, our sales could be adversely affected.

If we fail to manage our growth effectively, our ability to manufacture and sell our products could be adversely affected which could reduce our results from operations.

The increase in the number of our employees and the growth in our operations, combined with the challenges of managing geographically-dispersed operations, has placed, and we expect will continue to place, a significant demand on our management systems and resources. We continue to expand the scope of our operations in the United States, Germany, Italy and Russia and have increased the number of our employees substantially in the past year. In addition, we plan to hire a significant number of employees over the next few quarters. We expect that we will need to continue to improve our financial and managerial controls, reporting systems and procedures and continue to expand, train and manage our work force worldwide.

Competition in the fiber amplifier and fiber laser market for telecommunications applications is intense and could adversely affect our sales revenue and gross margins.

Many of our competitors are large public companies that have long operating histories, significantly greater financial, technical, marketing and other resources, name recognition, extensive customer bases, well-developed distribution channels and broad product offerings. These companies include ADC, Alcatel, Corning, Corvis, Furakawa, JDS Uniphase, Lucent, Marconi, SDL and Siemens. These competitors and others are able to devote greater resources than we can to the development, marketing, sale and support of their products, and they can leverage their customer bases and broader product offerings and adopt aggressive pricing policies to gain market share. We expect to encounter potential customers that, due to existing relationships with these and other competitors, are committed to the products offered by them. The intensity of competition in our business could both prevent us from increasing or maintaining our market share and force us to reduce the prices of our products. If we cannot increase our market share or if we are forced to reduce the prices of our products, our sales revenue could stagnate or decline. Similarly, if we are forced to reduce the prices of our products, our margins could decline. Several of our competitors have large market capitalizations or cash reserves, and are much better positioned than we are to acquire other companies in order to increase their size or gain new technologies or products that may displace ours. These competitors could also acquire one or more of our significant customers, thereby leading to a decline in our sales revenue. In other circumstances, some of our competitors could spin-out new companies in the fiber optic components market that could as free-standing companies compete more aggressively with us. Finally, additional competitors may enter our market, and we are likely to compete with new companies in the future.

If we cannot adequately protect our intellectual property rights, our business, results of operations or financial condition could be materially affected.

Our success and ability to compete substantially depends on our ability to sell products in which we may not have sufficient intellectual property rights. We currently do not have patents on any of our core technology that would preclude or inhibit customers from using our core technologies, and we

cannot assure you that we will be successful in protecting our technology through patent law. Historically, we have chosen to rely upon trade secrets and contractual restrictions, as opposed to patents, to protect our rights because of our limited resources. To the extent that our technology is not adequately protected by these laws and contractual restrictions, other companies could develop and market similar products or services which could seriously harm us. Attempts may be made to copy or reverse engineer aspects of our products or to obtain and use information that we regard as proprietary. Accordingly, we may not be able to prevent misappropriation of our technology or deter others from developing similar technology. Furthermore, policing the unauthorized use of our products is difficult. Although we have applied for U.S. federal trademark protection, we do not have any U.S. federal trademark registrations for the marks "IPG," "IPG Photonics" or "IPG Laser" or certain of our other marks and we may not be able to obtain such registrations due to conflicting marks or otherwise. Litigation may be necessary in the future to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. This litigation could result in public disclosure of our proprietary technology, substantial costs and diversion of resources.

We may be sued by third parties for infringement of their proprietary rights and we may incur defense costs, and possibly royalty obligations, or be prevented from using technology important to our business.

The fiber optic components and fiber laser industries are characterized by the existence of a large number of patents and frequent litigation based on allegations of patent infringement or other violations of intellectual property rights. Several manufacturers of fiber amplifiers have recently been sued for alleged infringement of a fiber amplifier patent. As the number of participants and the overall level of competitiveness in our markets increase, the possibility of an intellectual property claim against us increases. Any intellectual property claims, with or without merit, could be time consuming and expensive to litigate or settle and could divert management attention from administering our business. A third party asserting infringement claims against us or our customers with respect to our current or future products may adversely affect us by, for example, causing us to enter into costly licenses or incur settlement or litigation costs. We cannot assure you that third-party licenses will be available to us on commercially reasonable terms, or at all. The inability to obtain any third-party license required to continue the manufacture and sale of our current products or develop new products and product enhancements could require us to obtain substitute technology of lower quality or performance standards or at greater cost, either of which could seriously harm our ability to manufacture and sell our products.

If we fail to develop and successfully introduce new and enhanced products that meet the needs of our current and potential customers or do not comply with evolving fiber optic technology standards our business could be adversely affected.

The fiber amplifier and fiber laser industries are characterized by rapid technological changes, frequent new product introductions, changes in customer requirements and evolving standards. Our failure to predict accurately the needs of our customers and prospective customers, and to develop products or product enhancements that address those needs and these evolving standards, may result in the loss of

current customers or the inability to convert prospective customers into customers. While we intend to continue to invest in product and technology development, our products could quickly become obsolete as new technologies and standards are introduced and incorporated into new and improved products. In addition, if laser products are not broadly accepted for industrial applications as an alternative to current technology, we may incur significant expenses and losses due to lack of customer demand, unusable purchased components for these products and the diversion of our engineers from future product development efforts. The development of new or enhanced products is a complex and uncertain process that requires the accurate anticipation of technological and market trends. We may experience design, manufacturing, marketing and other difficulties that could delay or prevent the development, introduction or marketing of new products and enhancements. The introduction of new or enhanced products also requires that we manage the transition from older to newer products in order to minimize disruption in customer ordering patterns and ensure that adequate supplies of new products can be delivered to meet anticipated customer demand. Our inability to effectively manage this transition would harm our business, results of operations and financial condition.

The long sales cycles for our products may cause revenue and results of operations to vary from quarter to quarter causing our results of operations to fluctuate.

Customers often view the purchase of our products as a significant and strategic decision. As a result, customers typically expend significant effort in evaluating, testing and qualifying our products and our manufacturing process. This customer evaluation and qualification process frequently results in a lengthy initial sales cycle. While any customer or prospective customer is evaluating our products and before they place an order with us, we may incur substantial sales and marketing and research and development expenses to customize our products to their needs. We may also expend significant management efforts, increase manufacturing capacity and order long lead time components or materials prior to receiving an order. Even after this evaluation process, a customer or prospective customer may not purchase our products. Because of the evolving nature of the optical networking market, we cannot predict the length of these sales and development cycles.

Operations of our affiliate in Russia subject us to risks inherent in doing business in Russia.

We have agreed in principle to acquire a 51% interest in NTO IRE-POLUS, a company located in Russia and one of our affiliates. NTO IRE-POLUS conducts research and development and provides components and test equipment to us. The results of operations, business prospects and facilities of NTO IRE-POLUS are subject to the economic and political environment in Russia and the laws and regulations of the Russian Federation, such as those relating to taxation, import and export tariffs, environmental regulations, land use rights, property and other matters. If Russia's federal or local governments impose new restrictions or stricter regulations or interpretations of existing regulations, the supply of technology, test equipment or components to us from NTO IRE-POLUS could be limited and our results of operations and financial position could be harmed.

We may not be able to hire and retain the skilled personnel that we need to be successful.

Our ability to continue to attract and retain highly skilled personnel will be a critical factor in determining whether we will be successful. In order to implement our business plan, we have hired a significant number of additional employees and expect to hire significantly more in 2001, including engineering, marketing, sales and manufacturing personnel. Competition for these types of personnel is intense, especially in Germany where we have experienced shortages of qualified manufacturing personnel. We may not be successful in attracting, assimilating or retaining qualified personnel to fulfill our current or future needs, which could adversely impact our ability to manufacture and sell our products.

Our products are deployed in large and complex systems and may contain defects that are not detected until after our products have been installed, which could damage our reputation and cause us to lose customers.

Several of our products are designed to be deployed in large and complex optical networks. Although we test both critical components and our finished products, they can only be fully tested for reliability when deployed in networks for long periods of time. Our customers may discover defects in our products only after they have been fully deployed and have operated under peak stress conditions. In addition, our products are combined with products from other vendors. Should problems occur, it may be difficult to identify the source of the problem. If we are unable to fix defects or other problems, we could experience, among other things, loss of customers, damage to our brand reputation, failure to attract new customers or achieve market acceptance, diversion of development and engineering resources, and legal actions by our customers.

Our ability to grow may be limited if we need, but are unable to raise, additional capital.

We have accelerated the expansion of our manufacturing capacity and our capital expenditures, as well as increasing our inventory of materials, which has increased our need for working capital. We believe that the anticipated net proceeds of this offering, together with our existing cash balances, will be sufficient to meet our capital requirements for the foreseeable future. If we are required to raise additional funds, we may not be able to do so on favorable terms, or at all. If we cannot raise funds on acceptable terms, we may not be able to develop or enhance our products, take advantage of future opportunities or respond to competitive pressures or unanticipated requirements. Any such inability would seriously harm our business.

If we fail to successfully manage our exposure to the worldwide financial markets and currency fluctuations, our results of operations and financial condition could suffer.

A portion of our operating expenses and capital expenditures, and those of our subsidiaries, are denominated in the German mark, the Russian rouble and the Italian lira, and we currently do not engage in any hedging transactions. As a result, we are exposed to fluctuations in the exchange rates between these foreign currencies and the U.S. dollar and an increase in the value of these foreign currencies relative to the U.S. dollar could have a material adverse effect on our operating income. To reduce the impact of reductions in value and the volatility of future cash flows caused by changes in foreign exchange rates, we may need to establish hedging programs.

Any acquisitions that we undertake could be difficult to integrate, disrupt our business, dilute stockholder value and harm our results of operations and financial condition.

We expect to review opportunities from time to time to acquire or invest in other businesses and technologies that would complement our current products, expand the breadth of our markets or enhance our technical capabilities, or that may otherwise offer growth opportunities. From time to time, such acquisitions or investments may be required to remain competitive. If we make any future acquisitions, we could issue stock that would dilute existing stockholders' percentage ownership, incur substantial debt or assume contingent liabilities. Our experience in acquiring other businesses and technologies is limited. Potential acquisitions also involve numerous risks, including:

. problems assimilating the purchased operations, technologies or products;

. unanticipated costs associated with the acquisition;

. diversion of management's attention from our core business;

. adverse effects on existing business relationships with suppliers and customers;

. risks associated with entering markets in which we have no or limited prior experience; and . potential loss of key employees of purchased organizations.

We cannot assure you that we would be successful in overcoming problems encountered in connection with such acquisitions, and our inability to do so could significantly harm our business. We have no current agreements or negotiations under way except for our agreement in principle to acquire a 51% interest in NTO IRE-POLUS.

If we do not comply with various government export, communications and other regulations in the countries in which we operate and in which our products are used, we could be subject to significant fines, penalties or other adverse consequences and our manufacturing operations and ability to satisfy purchase orders and achieve financial projections could be harmed.

In most countries where our products are sold, our products must comply with the regulations of one or more governmental entities. These regulations often are complex and vary from country to country. Depending upon the country and the relevant product, the applicable regulations may require product testing, approval, registration, marking and unique design restrictions. Failure of our products to comply with these regulations in any country could result in our failure to complete sales of products for that country, the seizure or return to us of any non-compliant products and damage to our reputation, all of which would have an adverse effect on our business, results of operations and financial condition. Our products are also subject to U.S., German, Italian and Russian export control laws and regulations that regulate the export of products, including components, and disclosure of technical information to foreign countries and citizens. These laws and regulations may require licenses for the export of some of our products from one or more of the countries in which we are operating, as well as licenses for the disclosure of aspects of our technology to our employees who are employed in, but not citizens of, those countries. We cannot assure you that we will succeed in obtaining any of these

licenses. Depending on the outcome of any pending request, additional applications for licenses and other approvals may be required. We cannot assure you that any of these additional applications will be approved.

If we do not comply with various environmental and other safety regulations, we could be subject to significant fines, penalties and forced shutdowns of our manufacturing operations.

We are subject to a variety of national and local laws and regulations concerning the storage, use, discharge and disposal of toxic, volatile or otherwise hazardous or regulated chemicals or materials used in our manufacturing and assembly processes. Further, we are subject to other safety, labeling and training regulations as required by local, state and federal law. We cannot assure you that the systems we have in place to monitor and maintain compliance with these regulations will be adequate.

The failure of our customers to sell products that incorporate our products due to industry cyclicality, adverse economic conditions, large inventory positions, limited marketing resources and other factors could negatively impact our net sales.

Our business is significantly dependent on capital expenditures by manufacturers in the telecommunications as well as the industrial products area. These areas are cyclical and have historically experienced periods of oversupply, resulting in significantly reduced demand for capital equipment, including the products manufactured and marketed by us. Our net sales are dependent in part upon the ability of our customers to develop and sell systems that incorporate our fiber amplifiers, Raman pump lasers and fiber lasers. In addition, our customers could experience financial or other difficulties that could adversely affect our operations and, in turn, our financial condition or results of operations.

Risks Related to This Offering We expect to experience volatility in our share price, which could negatively affect your investment, and you may not be able to resell your shares at or above the offering price.

The market price of our common stock after the offering may vary from the offering price. If you purchase shares of common stock, you may not be able to resell those shares at or above the offering price. We expect that our common stock price will fluctuate significantly in the future due to:

. any deviations in our net sales revenue, gross profit or net income or losses from levels expected by securities analysts;

. changes in financial estimates by securities analysts;

. changes in market valuations of other optical component companies; and . future sales of our common stock or other securities.

In addition, the Nasdaq National Market has experienced volatility that has often been unrelated to the performance of particular companies. Future market fluctuations may cause our stock price to fall regardless of our performance.

We will have broad discretion to use the proceeds from this offering. If we do not use the proceeds effectively to develop and grow our business, your investment could suffer.

We intend to use a portion of the proceeds for the expansion of our manufacturing facilities, marketing and distribution activities, research and development activities, repayment of a portion of indebtedness and general corporate purposes. We may use the balance of the proceeds to acquire or invest in related businesses, products and technologies. Our management will have broad discretion in deciding how we use the net proceeds from this offering. You will not have the opportunity to evaluate the economic, financial or other information on which we base our decisions regarding the use of the net proceeds from this offering and we may spend these proceeds in ways that do not increase our results of operations or market value.

Insiders will continue to have substantial control over us after this offering and could delay or prevent a change in our corporate control and cause our stock price to decline.

Upon completion of this offering and assuming no exercise of the underwriters' over-allotment option, our executive officers, directors and principal stockholders who hold 5% or more of the outstanding common stock and their affiliates will beneficially own, in the aggregate, approximately % of our outstanding common stock based on shares outstanding as of September 30, 2000. As a result, these stockholders will be able to continue to exercise significant control over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, which could delay or prevent an outside party from acquiring or merging with us and cause our stock price to decline. You should read "Principal Stockholders" for a full presentation of the equity ownership of these stockholders.

There may be sales of a substantial amount of our common stock after this offering that could cause our stock price to fall.

Our current stockholders hold a substantial number of shares, a significant portion of which they will be able to sell in the public market 180 days after the date of this prospectus. Sales of a substantial number of shares of our common stock after this offering could cause our stock price to fall. In addition, the sale of these shares could impair our ability to raise capital through the sale of additional stock. You should read "Shares Eligible for Future Sale" for a full discussion of the shares that may be sold in the public market in the future.

Provisions of our charter documents, Delaware law and change of control agreements may have anti-takeover effects that could prevent a change in control, which may cause our stock price to decline.

Provisions of our certificate of incorporation and bylaws may discourage, delay or prevent a merger or acquisition that a stockholder may consider favorable. These provisions include authorizing our board of directors to issue preferred stock without stockholder approval and prohibiting cumulative voting in the election of directors. Certain provisions of Delaware law also may discourage, delay or prevent someone from acquiring or merging with us, which may cause the market price of our common stock to

decline. You should read "Description of Capital Stock--Delaware Anti-Takeover Law and Certain Charter and Bylaw Provisions" for a full discussion of the charter and bylaw provisions and Delaware anti-takeover law.

As a new investor, you will incur substantial dilution as a result of this offering and future equity issuances.

The initial public offering price will be substantially higher than the pro forma net tangible book value per share of our outstanding common stock. As a result, investors purchasing common stock in this offering will incur immediate dilution of $ per share. The exercise of outstanding options and warrants and future equity issuances will result in further dilution.

Forward-looking Statements

This prospectus, including the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," contains forward-looking statements within the meaning of the federal securities laws that relate to future events or our future financial performance. These statements involve known and unknown risks, uncertainties and other factors that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by the forward-looking statements. These risks and other factors include those listed under "Risk Factors" and elsewhere in this prospectus. In some cases, you can identify forward-looking statements by words such as "may," "will," "should," "could," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable words. In addition, these forward-looking statements include, but are not limited to, statements regarding the following:

. the expansion of our manufacturing capacity;

. improvement of our manufacturing efficiencies;

. development and introduction of new products;

. anticipated sources of future revenues;

. the possibility of lower prices, reduced margins and loss of market share due to increased competition;

. anticipated expenditures for research and development, sales and marketing and general and administrative expenses; and . the adequacy of our capital resources to fund our operations.

These statements are only predictions. Although we believe that the expectations reflected in the forward-looking statements are reasonable at this time, we cannot guarantee future results, levels of activity, performance or achievements. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information or future events.

Use of Proceeds

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      We estimate our net proceeds from the sale of the     shares of common
stock offered by us in this offering to be approximately $    , based on an
assumed initial public offering price of $    per share and after deducting the
estimated underwriting discount and offering expenses. The net proceeds will be
approximately $    if the underwriters' over-allotment option is exercised in
full.
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We intend to use the net proceeds of this offering for:

. expansion of manufacturing facilities;

. sales and marketing activities;

. research and development activities;

. repayment of a portion of outstanding indebtedness; and . working capital and other general corporate purposes.

If the opportunity arises, we may use a portion of the net proceeds from this offering to acquire or invest in related businesses, joint ventures, products and technologies. Except for our agreement in principle to acquire a 51% interest in our Russian affiliate, we currently have no commitments or agreements for any material acquisition of, or investment in, any third party, or creation of any joint ventures. The amount and timing of these expenditures will vary depending on a number of factors, including future revenue growth, if any, the amount of cash we generate from operations, the progress of our manufacturing, sales and marketing expansion efforts and our international market penetration. Pending any use of the net proceeds for the above purposes, we intend to invest the funds in short-term, interest-bearing, investment grade securities. For more information, see "Business--The IPG Strategy."

Dividend Policy

We have never paid dividends on our capital stock. We currently intend to retain future earnings to finance the growth and development of our business, and we do not anticipate paying any dividends in the foreseeable future.

Capitalization

The following table sets forth our cash, debt, minority interests and capitalization as of September 30, 2000:

. on an actual basis;

. on a pro forma basis, giving effect to:

. the issuance of an additional 800,000 shares of Series B preferred stock at $25.00 per share subsequent to September 30, 2000;

. the issuance of 1,403,000 shares of our common stock in connection with the acquisition of the remaining ownership of IPG Laser in October 2000;

. the issuance, subsequent to September 30, 2000, of 500,000 common shares for a note receivable for $500,000 and options to purchase 1,000,000 common shares at a price of $3.00 per share, reflecting a compensation charge of $12.0 million and deferred compensation charge of $22.0 million;

. the issuance, subsequent to Sept. 30, 2000, of options to purchase 352,000 common shares at a weighted-average price of $7.39 per share to employees and members of the Board of Directors, reflecting a deferred compensation charge of $6.2 million.

. the conversion of all outstanding shares of Series A preferred stock into 500,000 shares of common stock;

. the conversion of all outstanding shares of Series B preferred stock into 3,800,000 shares of common stock; and . on a pro forma as adjusted basis, giving effect to:

. the payment of a portion of outstanding indebtedness from the proceeds of this offering; and

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. to reflect the sale of     shares of our common stock in this
  offering, at an assumed initial public offering price of $   per
  share and after deducting the estimated underwriting discount and
  estimated offering expenses, and our receipt and application of
  the net proceeds.
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You should read this table along with "Use of Proceeds," "Management's Discussion and Analysis of Financial Condition and Results of Operations," our combined consolidated financial statements and the related notes and the other financial information in this prospectus.

September 30, 2000 Pro Forma Actual Pro Forma As Adjusted (In thousands, except per share data) Cash..... $65,814 $ 85,814 $ Debt, including current portion..... $ 7,299 $ 7,299 $ Minority interests..... 421 421 Convertible redeemable preferred stock--Series B, $0.0001 par value; 3,800,000 shares authorized, 3,000,000 shares issued and outstanding at September 30, 2000 actual; no shares issued or outstanding at September 30, 2000 on a pro forma and pro forma as adjusted basis..... 62,389 -- -- Shareholders' equity: Preferred stock--$0.0001 par value; 700,000 shares authorized, no shares issued or outstanding..... -- -- -- Convertible preferred stock--Series A, $0.0001 par value; 500,000 shares authorized, 500,000 shares issued and outstanding at September 30, 2000 actual; no shares issued or outstanding at September 30, 2000 on a pro forma and pro forma as adjusted basis..... 4,954 -- -- Common stock, $.0001 par value, 50,000,000 shares authorized, 33,980,934 shares issued and outstanding at September 30, 2000 actual; 50,000,000 shares authorized, 40,183,934 shares issued and outstanding at September 30, 2000 on pro forma basis and shares issued and outstanding at September 30, 2000 on a pro forma as adjusted basis..... 3 4 Additional paid-in capital..... 23,412 148,143 Warrants to issue common stock..... 12,400 15,707 Notes receivable from shareholders..... (440) (940) Deferred compensation..... (13,242) (41,439) Accumulated

deficit..... (6,227) (18,227) Accumulated other comprehensive income..... (689) (689) Total shareholders' equity..... 20,171 102,559 Total capitalization..... $90,280 $110,279 $ (1) Excludes:

. 2,377,766 shares of common stock issuable upon exercise of options outstanding at September 30, 2000 under our 2000 stock incentive plan, with a weighted-average exercise price of $1.14 per share, 1,352,000 shares issuable upon exercise of options granted subsequent to September 30, 2000, with a weighted-average exercise price of $4.14 per share;

. 100,000 shares of common stock issuable upon exercise of non-plan stock options outstanding at September 30, 2000 with a weighted- average exercise price of $1.00;

. 500,000 shares of restricted common stock issued under our 2000 stock incentive plan subsequent to September 30, 2000, at a price of $1.00 per share;

. 2,939,300 shares reserved for issuance under our 2000 stock incentive plan as of November 30, 2000; and

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.      shares of common stock issuable upon exercise of warrants
   outstanding at September 30, 2000 held by owners of our Series B
   convertible redeemable preferred stock, assuming an exercise price of
   $    .
```

Dilution

The pro forma net tangible book value of our common stock as of September 30, 2000 was approximately $ million, or $ per share. Pro forma net tangible book value per share represents the amount of our total tangible assets less total liabilities, divided by the pro forma number of shares of common stock outstanding (after giving effect to the conversion of all outstanding shares of Series A and Series B preferred stock into an aggregate of shares of common stock). Dilution in pro forma net tangible book value per share represents the difference between the amount per share paid by investors in this offering and the book value per share of our common stock immediately after the offering, after the conversion of all outstanding shares of our Series A and Series B preferred stock and the repayment of a portion of outstanding indebtedness. After giving effect to our sale of shares of common stock offered by this prospectus, at an assumed initial public offering price of $ per share and after deducting the underwriting discount and estimated offering expenses payable by us, our pro forma net tangible book value would have been approximately $, or $ per share. This represents an immediate increase in pro forma net tangible book value of $ per share to existing stockholders and an immediate dilution in pro forma net tangible book value of $ per share to new investors purchasing shares of common stock in this offering. The following table illustrates this dilution.

Initial public offering price per share..... $ Pro forma net tangible book value per share as of September 30, 2000..... $ Increase per share attributable to new investors..... Pro forma net tangible book value per share after this offering... Dilution per share

to new investors..... $ This table excludes all options and warrants that will remain outstanding upon completion of this offering. The exercise of outstanding options and warrants having an exercise price less than the offering price would increase the dilutive effect to new investors.

The following table summarizes, on a pro forma basis, as of September 30, 2000:

. the number of shares of common stock purchased from us;

. the total consideration paid to us;

. the average price per share paid by existing stockholders; and . the average price per share paid by new investors, before deducting the estimated underwriting discount and offering expenses payable by us.

	Shares Purchased		Total Consideration		Average Price Per Share	
	Number	Percent	Amount	Percent	Amount	Percent
Existing stockholders.....		%	$	%	$	%
New investors.....		%	$	%	$	%
Total.....		100%	$	100%	$	100%

The information in the above tables excludes 2,377,766 shares of common stock issuable upon exercise of options outstanding at September 30, 2000 under our 2000 stock incentive plan with a weighted average exercise price of $1.14 per share, 100,000 shares of common stock issuable upon exercise of non-plan stock options at September 30, 2000 with a weighted-average exercise price of $1.00, 500,000 shares of restricted common stock issued at a price of $1.00 per share, warrants issued to purchase shares of common stock with an exercise price of per share, 1,352,000 shares of common stock issuable upon exercise of options granted subsequent to September 30, 2000 with a weighted average exercise price of $4.14 per share and up to shares that may be issued by us pursuant to the underwriters' over-allotment option. To the extent these options and warrants are exercised, there will be further dilution to the new investors. For more information, see "Management--Stock Option Plan" and the notes to our combined consolidated financial statements.

Selected Combined Consolidated Financial Data

We were incorporated on December 2, 1998 and at that date shared an affiliation through common ownership with IPG Laser, IPG Fibertech, and NTO IRE-POLUS, collectively known as the IPG Group. In August 2000, the IPG Group was reorganized, resulting in IPG Laser becoming our wholly-owned subsidiary upon completion of the reorganization. In addition to the August 2000 reorganization, the Company and NTO IRE-POLUS have an agreement in principle for the Company to acquire a 51% interest in NTO IRE-POLUS. The NTO IRE-POLUS transaction is expected to close by January 31, 2001. Because the Company, IPG Laser, IPG Fibertech, the 80% owned subsidiary of IPG Laser, and NTO IRE-POLUS have been under common managerial, operational and shareholder control since inception, the transfers of interest are accounted for in the financial statements as a reorganization of companies under common control in a manner similar to a pooling of interests. Our combined consolidated financial statements include the accounts of NTO IRE-POLUS, IPG Laser and IPG

Fibertech. All intercompany transactions and balances have been eliminated. For purposes of presentation of the combined consolidated financial statements for the years ended December 31, 1997 and 1998, NTO IRE-POLUS, IPG Laser and IPG Fibertech, are referred to as the Predecessor.

We prepare our financial statements in accordance with accounting principles generally accepted in the United States. The selected combined consolidated financial data presented below as of December 31, 1998 and 1999 and for each of the three years in the period ended December 31, 1999 are derived from our audited combined consolidated financial statements included elsewhere in this prospectus. The selected combined consolidated financial data as of December 31, 1995, 1996 and 1997 and for the years ended December 31, 1995 and 1996 are derived from our unaudited combined consolidated financial statements that are not included in this prospectus. The unaudited combined consolidated financial statements have been prepared on the same basis as the audited combined consolidated financial statements and, in the opinion of our management, include all adjustments necessary for a fair presentation of the information set therein. The calculation of pro forma net income per share is calculated assuming our outstanding preferred stock were common stock from the date of original issuance. Historical results are not necessarily indicative of results that may be expected for any future period.

The combined consolidated financial data as of September 30, 2000 and for the nine months ended September 30, 1999 and 2000 are derived from our unaudited combined consolidated financial statements included elsewhere in this prospectus. We have prepared the unaudited information on the same basis as the audited combined consolidated financial statements and have included all adjustments that we consider necessary for a fair presentation of our financial position and operating results for the interim periods. Our results of operations for the nine month period ended September 30, 2000 are not necessarily indicative of our results for the full fiscal year ended December 31, 2000.

You should read the Selected Combined Consolidated Financial Data set forth below in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our combined consolidated financial statements and the related notes included elsewhere in this prospectus.

For the nine months ended For the year ended December 31, September 30, 1995 1996 1997 1998 1999 1999 2000 (in thousands, except per share data) Predecessor

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Statement of Operations Data:
Net sales..................................................... $1,396  $1,486  $3,124  $8,289
$18,637  $14,831  $32,512
Cost of sales (1).............................................    575     939   2,065   5,327
9,307    6,795   11,055
Gross profit (1).............................................    821     547   1,059   2,962
9,330    8,036   21,457
Operating expenses:
 Sales and marketing (2).....................................     87      51     219     374
677      619    1,049
 Research and development (3)................................    371     472     312     840
1,695    1,190    1,610
 General, administrative and other (4).......................    316     406     322   1,040
2,766    2,046    4,066
 Equity-based compensation...................................     --      --      --      --
--       --    8,719
```

Total operating expenses	774	929	853	2,254	5,138	3,855	15,444					
Operating income (loss)	47	(382)	206	708	4,192	4,181	6,013					
Interest income (expense), net	(35)	(58)	(118)	(208)	(303)	(231)	(77)					
Other income (expense), net	139	335	(14)	38	126	(42)	401					
Income (loss) before provision (benefit) for income taxes and minority interests	151	(105)	74	538	4,015	3,908	6,337					
Provision (benefit) for income taxes	72	(96)	31	234	2,206	2,232	4,639					
Minority interests in (income) loss of less than 100% owned companies	18	(40)	(19)	(77)	69	113	(242)					
Net income (loss)	97	(49)	24	227	1,878	1,789	1,456					
Accretion of preferred stock	--	--	--	--	--	--	(169)					
Net income (loss) available to common shareholders	$ 97	$ (49)	$ 24	$ 227	$ 1,878	$ 1,789	$ 1,287					
Net income per share: (5)												
Basic	--	--	--	--	$ 0.05	$ 0.05	$ 0.04					
Diluted	--	--	--	--	$ 0.05	$ 0.05	$ 0.04					
Pro forma net income per share: (5)												
Basic	--	--	--	--	--	--	$ 0.04					
Diluted	--	--	--	--	--	--	$ 0.04					

(1) Excludes $677 of equity-based compensation for the nine months ended September 30, 2000. (2) Excludes $166 of equity-based compensation for the nine months ended September 30, 2000. (3) Excludes $184 of equity-based compensation for the nine months ended September 30, 2000. (4) Excludes $7,692 of equity-based compensation for the nine months ended September 30, 2000. (5) The calculation of net income per share and pro forma basic and diluted net income per share is described in Note 3 to the combined consolidated financial statements.

December 31, ---------- September 30, 1995 1996 1997 1998 1999 2000 (in thousands) Predecessor

Balance Sheet Data:						
Cash and cash equivalents..	$ 252	$ 214	$ 224	$1,311	$ 740	$65,814
Working capital (deficiency).....	83	706	908	895	(577)	71,779
Total assets.....	1,447	2,546	3,737	9,135	13,143	103,446
Long-term debt, including current portion.....	762	1,597	2,483	4,716	4,646	7,299
Convertible redeemable preferred stock.....	--	--	--	--	--	62,389
Convertible preferred stock.....	--	--	--	--	--	4,954
Shareholders' equity.....	185	295	424	676	2,385	20,171

Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ substantially from those anticipated in these forward-looking statements as a result of many factors, including those set forth under "Risk Factors" and elsewhere in this prospectus. The following discussion should be read together with our combined consolidated financial statements and related notes thereto included elsewhere in this prospectus.

Overview

We design, manufacture and sell high performance fiber amplifiers, Raman pump lasers and fiber lasers for telecommunications and industrial applications. Our proprietary technology, materials science expertise and vertically integrated manufacturing operations enable us to produce cost- effective, high and low power fiber amplifiers and lasers with substantial power efficiency, improved signal to noise performance, reliability and quality that operate over a wider range of the usable optical spectrum. Our telecommunications products are used in the long-haul, metropolitan and access segments of optical communications networks. Our industrial products are used for marking, printing, materials processing, micro-machining, optical sensing and measurement, and laboratory and medical equipment.

Financial Statement Presentation We were incorporated as a Delaware corporation in December 1998 and began operations in the United States in 1999. In November 1994, our founding shareholder founded and incorporated a new company in Germany, IPG Laser GmbH. In 1998, IPG Fibertech S.r.l. was incorporated in Italy as an 80% owned subsidiary of IPG Laser. In August 2000, we restructured the ownership of several affiliated companies, acquiring 100% of IPG Laser and 80% of IPG Fibertech. For more detail regarding this restructuring, see "Transactions with Related Parties--Restructuring." In addition, we expect to acquire a 51% interest in our affiliate NTO IRE-POLUS by January 31, 2001. NTO IRE-POLUS began its operations in 1991 in Russia as IRE-POLUS.

The combined consolidated financial statements and all financial data included throughout this prospectus include IPG Laser, IPG Fibertech and NTO IRE-POLUS. These combined consolidated financial statements have been prepared on the basis of accounting principles generally accepted in the United States. All inter-company transactions and balances have been eliminated. The historical financial statements of IPG Laser, IPG Fibertech and NTO IRE-POLUS have been prepared in their local functional currencies and have been translated to U.S. dollars for purposes of financial reporting. For purposes of the preparation of the combined consolidated financial statements for the years ended December 31, 1997 and 1998, NTO IRE-POLUS, IPG Laser and IPG Laser's 80% owned subsidiary, IPG Fibertech, are referred to as the Predecessor. The combination of these financial statements, in the opinion of management, represents the results of our operations and financial condition as if the acquisition of IPG Laser and IPG Fibertech and the proposed acquisition of NTO IRE-POLUS had

been in place as of January 1, 1997. However, the results of our operations may have been different if we had managed these entities as one consolidated entity. As such, our historical results may not be indicative of future operations.

Net Sales

We derive revenues from two product lines: fiber amplifiers and Raman pump lasers for the telecommunications industry, and fiber lasers for industrial applications. Telecommunications revenue represented 77.2% of our revenue for the nine months ended September 30, 2000.

During 1999 and throughout 2000, we significantly expanded our sales and customer relationships. However, we continued to derive a significant portion of our recent sales from a limited number of companies. These customers include ADC, Agilent, Alcatel, Calient, Corning, Corvis, Hughes Space and Communications, JDS Uniphase, Lucent, Marconi, MIT Lincoln Labs, Molecular OptoElectronics, Nortel, Siemens, T.E.M. and TeraBeam in our telecommunications product line and Baasel Scheel Lasergraphics, DaimlerChrysler Aerospace, GSI Lumonics, Krause Danmark, Purup Escofot and Sunx in our industrial applications product line. These customers represent those who have purchased over $100,000 from us or our distributors for the eleven months ended November 30, 2000. Our combined consolidated sales to these customers comprised 86.4% of our net sales for the year ended December 31, 1999 and 87% of our net sales for the nine months ended September 30, 2000. Our total revenue may decline significantly if these customers cancel, reduce or delay purchases. As of September 30, 2000, we do not have any written commitments from our customers for deliveries to be made in 2001. Our total backlog of purchase orders as of September 30, 2000 was approximately $18 million, substantially all of which we expect to fulfill by December 31, 2000. Our sales are made on a purchase order basis rather than by long-term purchase commitments. As such, our customers may cancel or defer purchase orders without penalty on short term notice. In addition, we have not experienced a trend towards seasonality of our revenues. For the nine months ended September 30, 2000, 71.5% of our sales have been in North America and 16.2% of our sales have been in Europe.

The average selling prices of our products generally decrease as the products mature, especially in the telecommunications industry. These decreases arise from factors such as increased competition, the introduction of new products, maintenance of market share and increases in unit volumes. In addition, we have in the past lowered our selling prices in order to establish new markets and niches where previously it was not economically feasible for customers to deploy our products. We cannot predict the timing and degree of these price declines.

Gross Profits

Our cost of sales consists primarily of raw materials and components, direct labor and an allocation of indirect labor and manufacturing overhead. We are vertically integrated and currently manufacture a majority of the critical components for our products. Our vertical integration lowers our cost of sales. We currently maintain surplus inventory of key components sourced from outside vendors to ensure an adequate supply and to be able to fill orders quickly for our customers. This higher inventory may result in a greater risk of obsolete inventory in the future.

Our gross profits are typically greater for high power telecommunications products. Our overall gross profits have increased over the last three years because of increased productivity and economies of scale. As we continue automation of our manufacturing processes in both our new and existing facilities and manufacture additional components in-house, we anticipate further economies and productivity gains. We expect, however, that these economies and productivity gains will only partially offset decreases in average selling prices.

Operating Expenses

Sales and marketing. Sales and marketing expenses consist primarily of salaries and related personnel costs, travel expenses, expenses related to trade shows, exhibitions and other marketing events. One of our strategies is to expand our marketing operations significantly to increase market awareness and acceptance of our products and build sales from these efforts. In addition, we expect to expand our customer service and support organizations in order to maintain and support our customers. We expect to incur additional sales and marketing expenses in the future as we hire staff, establish an advertising program, print and distribute promotional material and supply sample products to potential new customers.

Research and development. Research and development expenses consist primarily of salaries and related personnel costs, test and prototype expenses related to the design of our products, and facilities costs. We use a common research and development platform for both our telecommunications and industrial products. Most costs related to product development are recorded as research and development expenses in the period in which they are incurred. However, the research and development costs of prototypes developed for customer-specific solutions are reported as cost of sales if those prototypes are sold. We expect that research and development expenses will increase significantly as we continue to enhance our existing products and expand new product development.

General, administrative and other. General, administrative and other expenses consist primarily of salaries and related personnel costs, recruiting expenses and costs associated with the infrastructure that supports our operations. We intend to create an information technology department that will implement and maintain an enterprise resource planning system for our worldwide operations. We anticipate that in addition to the cost of our new information technology department, general, administrative and other costs will also increase to support the expansion of our infrastructure and as a result of being a public company.

Equity-based compensation. Equity-based compensation represents the difference between the estimated fair value of the common stock underlying the options and the exercise price of those options at the date the options were granted. These amounts are being amortized using the straight-line method over the vesting period of the options, which is generally four years. In connection with the grant of stock options to our employees, we recorded deferred compensation of approximately $22.0 million through September 30, 2000. Subsequent to September 30, 2000, we issued 500,000 shares of restricted common stock at a price of $1.00 per share resulting in a compensation charge of $12.0 million and granted 1,352,000 options to purchase common stock to employees and the members of the Board of Directors with an aggregate deferred compensation expense of $28.2 million.

Results of Operations The following table sets forth for the periods indicated the percentage of net sales represented by the items included in our combined consolidated statements of operations for the years ended December 31, 1997, 1998 and 1999, and the nine month periods ended September 30, 1999 and 2000.

	Year Ended December 31,			Nine Month Period Ended September 30,		
	1997	1998	1999	1999	2000
	Predecessor				
Net sales	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of sales(1)	66.1%	64.3%	49.9%	45.8%	34.0%
Gross profit(2)	33.9%	35.7%	50.1%	54.2%	66.0%
Operating Expenses:					
Sales and marketing(3)	7.0%	4.5%	3.6%	4.2%	3.2%
Research and development(4)	10.0%	10.1%	9.1%	8.0%	5.0%
General, administrative and other(5)	10.3%	12.6%	14.9%	13.8%	12.5%
Equity-based compensation(6)	0.0%	0.0%	0.0%	0.0%	26.8%
Total operating expenses	27.3%	27.2%	27.6%	26.0%	47.5%
Operating income	6.6%	8.5%	22.5%	28.2%	18.5%
Interest income (expense), net	(3.8%)	(2.5%)	(1.6%)	(1.5%)	(0.2%)
Other income (expense), net	(0.4%)	0.5%	0.6%	(0.3%)	1.2%
Income before provision for income taxes and minority interests	2.4%	6.5%	21.5%	26.4%	19.5%
Provision for income taxes	1.0%	2.8%	11.8%	15.0%	14.3%
Minority interest in (income) loss of less than 100% owned companies	(0.6%)	(1.0%)	0.4%	0.8%	(0.7%)
Net income (loss)	0.8%	2.7%	10.1%	12.1%	4.5%

(1) After allocation of $677 equity-based compensation for the nine months ended September 30, 2000, the percentage of net sales would increase to 36.1%. (2) After allocation of $677 equity-based compensation for the nine months ended September 30, 2000, the percentage of net sales would decrease to 63.9%. (3) After allocation of $166 of equity-based compensation for the nine months ended September 30, 2000, the percentage of net sales would increase to 3.7%. (4) After allocation of $184 of equity-based compensation for the nine months ended September 30, 2000, the percentage of net sales would increase to 5.5%. (5) After allocation of $7,692 of equity-based compensation for the nine months ended September 30, 2000, the percentage of net sales would increase to 36.2%. (6) Percentage of net sales would be 0% for the nine months ended September 30, 2000 after allocation of equity-based compensation.

Nine Months Ended September 30, 2000 Compared to Nine Months Ended September 30, 1999 Net sales. Net sales increased $17.7 million, or 119.2%, to $32.5 million for the nine months ended September 30, 2000 from $14.8 million during the comparable period in 1999. This increase was due primarily to new orders for fiber amplifiers for free-space optical communications and, in part, to orders for long-haul fiber amplifiers and Raman pump lasers and a growth in our industrial products sales. Our telecommunications products accounted for $25.1 million, or 77.2%, of net sales for the nine months ended September 30, 2000 and $11.4 million, or 76.8%, of net sales for the nine months ended September 30, 1999. Our industrial products accounted for the remainder of our net sales in both of these periods. We do not foresee a significant change in our product mix in the short term. Net sales to customers in North America increased $14.0 million, or 152.3%, to $23.3 million for the nine months ended September 30, 2000 from $9.2 million during the comparable period in 1999 due to increased sales of optical communications products and the overall expansion of our customer base in the United States. We expect that our sales to North American customers will continue to comprise the significant majority of our worldwide sales.

Gross Profits. Gross profits increased $13.4 million, or 167.0%, to $21.5 million for the nine months ended September 30, 2000 from $8.0 million during the comparable period in 1999. This increase resulted from both an increase in net sales and the effects of increased productivity, economies of scale and volume component purchases.

Sales and marketing expenses. Sales and marketing expenses increased $430,000, or 69.5%, to $1.0 million for the nine months ended September 30, 2000 from $619,000 during the comparable period in 1999. This increase in marketing expenses resulted principally from an increase in the number of sales and marketing personnel and an increase in expenditures for public relations and promotional materials.

Research and development expenses. Research and development expenses increased $420,000, or 35.3%, to $1.6 million for the nine months ended September 30, 2000 from $1.2 million during the comparable period in 1999. This increase resulted from the hiring of additional research and development personnel and more research and development activities conducted by the existing staff.

General, administrative and other expenses. General, administrative and other expenses increased $2.0 million, or 98.7%, to $4.1 million for the nine months ended September 30, 2000 from $2.0 million during the comparable period in 1999. This increase resulted from the hiring of additional management and administrative personnel, such as a president and a chief operating officer, as well as significant professional fees relating to our restructuring.

Equity-based compensation expenses. During the nine months ended September 30, 2000, we issued approximately 2.1 million options to purchase our common stock at a weighted-average exercise price of 1.20 per share, resulting in deferred compensation of $22.0 million. This deferred compensation will be amortized over the options' vesting periods, generally four years, and resulted in the recognition of $8.7 million of equity-based compensation expense during the nine month period ended September 30, 2000. Options to purchase our common stock issued during the comparable period in 1999 did not result in deferred compensation.

Interest income (expense), net. Net interest expense decreased $154,000, or 66.7%, to $77,000 for the nine months ended September 30, 2000 from $231,000 during the comparable period in 1999. The decrease in interest expense was caused principally by the capitalization of approximately $152,000 of interest expense during the nine months ended September 30, 2000 for construction projects in the United States and Germany, and the effect of interest income on the net proceeds from the private placements of Series A and Series B preferred stock.

Other income (expense), net. Other income increased $443,000 to $401,000 in the nine months ended September 30, 2000 from a net expense of $42,000 during the comparable period in 1999. Other income is primarily comprised of transaction exchange rate gains and losses from U.S. dollar denominated sales and cost of sales by our German, Italian and Russian subsidiaries and affiliates.

Provision for income taxes. Provision for income taxes has increased $2.4 million to $4.6 million for the nine months ended September 30, 2000 from $2.2 million during the comparable period in 1999 resulting in an effective tax rate of 73.2% in 2000 and 57.1% in 1999. The increased effective tax rate reflects nondeductible equity based compensation which was recorded in 2000.

Net income. As a result of the foregoing factors, net income of $1.8 million for the nine months ended September 30, 1999 decreased to $1.5 million in the comparable period in 2000. Excluding equity-based compensation, our net income would have been $9.3 million in the nine months ended September 30, 2000 as compared with $1.8 million in the comparable period in 1999.

Year Ended December 31, 1999 Compared to Year Ended December 31, 1998 Net sales. Net sales increased $10.3 million, or 124.8%, to $18.6 million in 1999 from $8.3 million in 1998. This increase was attributable primarily to an increase in the number of new customers and sales growth from existing customers, with fiber amplifiers for the access segment comprising a majority of our net sales. Our telecommunications products accounted for 77.2% of our net sales in 1999 and 71.9% in 1998.

Gross Profits. Gross profits increased $6.4 million, or 215.0%, to $9.3 million for 1999 from $3.0 million for 1998. This increase is principally due to increased sales during the period and an overall increase in the gross profit percentage from 35.7% to 50.1%. The increase in gross profit resulted from increased productivity and economies of scale and volume component purchases.

Sales and marketing expenses. Sales and marketing expenses increased $303,000, or 81.0%, to $677,000 in 1999 from $374,000 in 1998. This increase resulted principally from increased senior management time devoted to sales and marketing efforts during 1999, and to a lesser extent, increased attendance at trade shows and fairs.

Research and development expenses. Research and development expenses increased $855,000, or 101.8%, to $1.7 million in 1999 from $840,000 in 1998. This increase resulted from the hiring of additional research and development personnel, the continued development of our existing technology platform and the development of new products for both telecommunications and industrial applications.

General, administrative and other expenses. General, administrative and other expenses increased $1.7 million, or 166.0%, to $2.8 million in 1999 from $1.0 million in 1998. This increase resulted from start-up costs related to the formation of IPG Photonics in the United States, the hiring of additional management and administrative staff, such as our controller and vice president of corporate affairs.

Interest income (expense), net. Net interest expense increased $95,000, or 45.7%, to $303,000 in 1999 from $208,000 in 1998 due to an overall increase in borrowings.

Other income (expense), net. Other income increased $88,000, or 231.6%, to $126,000 in 1999 from $38,000 in 1998, reflecting primarily foreign currency gains arising from the appreciation of the U.S. dollar relative to the Deutsche mark in 1999.

Provision for income taxes. Provision for income taxes increased $2.0 million to $2.2 million in 1999 from $234,000 in 1998 resulting in an effective tax rate of 54.9% in 1999 and 43.5% in 1998. This increased tax rate reflects the higher contribution to total net income before taxes from our German operations during 1999 coupled with a high statutory tax rate in Germany.

Net income. As a result of the foregoing factors, net income increased from $227,000 in 1998 to $1.9 million in 1999.

Year Ended December 31, 1998 Compared to Year Ended December 31, 1997 Net sales. Net sales increased $5.2 million, or 165.3%, to $8.3 million in 1998 from $3.1 million in 1997. This increase was primarily due to a large order from a new customer for use of our products in low density access networks and, to a lesser extent, increased sales of free-space optical communication products. Our telecommunications products accounted for 71.9% of our net sales in 1998 and 60.8% in 1997.

Gross Profits. Gross profits increased $1.9 million, or 179.7%, to $3.0 million for 1998 from $1.1 million for 1997. This increase resulted from increased sales during the period and an overall increase in the gross profit percentage from 33.9% to 35.7%. The increase in gross profit percentage resulted from increased productivity in manufacturing and assembly processes, the implementation and improvement of training programs for our assembly personnel and gains resulting from economies of scale, higher yields on component production and the improved quality of purchased components.

Sales and marketing expenses. Sales and marketing expenses increased $155,000, or 70.8%, to $374,000 in 1998 from $219,000 in 1997. This increase resulted principally from increased senior management time devoted to sales and marketing efforts.

Research and development expenses. Research and development expenses increased $528,000, or 169.2%, to $840,000 in 1998 from $312,000 in 1997. This increase resulted from additional resources being devoted to research and development for the development of new products, fibers and components.

General, administrative and other. General, administrative and other expenses increased $718,000, or 223.0%, to $1.0 million in 1998 from $322,000 in 1997. This increase resulted from the general expansion of the business, including additions to our senior management team in Germany and hiring additional administrative personnel.

Interest income (expense), net. Net interest expense increased $90,000, or 76.3%, to $208,000 in 1998 from $118,000 in 1997. This increase resulted from an increase in overall borrowings.

Other income (expense), net. Other income increased $52,000 to $38,000 in 1998 from net other expense of $14,000 in 1997, reflecting foreign currency effects.

Provision for income taxes. Provision for income taxes increased $203,000 to $234,000 in 1998 from $31,000 in 1997 resulting in an effective tax rate of 43.5% in 1998 and 41.9% in 1997.

Net income. As a result of the foregoing factors, net income increased to $227,000 in 1998 from $24,000 in 1997.

Liquidity and Capital Resources From January 1, 1997 through September 30, 2000, our principal sources of funds were $8.6 million from operations, $6.4 million from net borrowings and $79.4 million from the sale in 2000 of our Series A and Series B preferred stock. Our working capital excluding cash was $6.0 million and our cash on hand was $65.8 million at September 30, 2000. These amounts do not reflect the receipt of an additional $20.0 million subsequent to September 30, 2000 as a result of an additional sale of our Series B preferred stock.

Our liquidity requirements arise principally from the need to:

. expand our manufacturing facilities;

. increase our marketing and distribution activities;

. increase our research and development activities;

. repay a portion of our outstanding indebtedness; and . fund our working capital.

Cash Flow from Operating Activities Net cash provided by operating activities totaled $3.1 million for the nine months ended September 30, 1999 and $2.2 for the nine months ended September 30, 2000. Net cash provided by operating activities totaled $51,000, $2.1 million and $4.1 million for the years ended December 31, 1997, 1998 and 1999, respectively. The decrease in operating cash flows in 2000 reflects an increase in accounts receivable and inventory partially offset by growth in net income before equity-based compensation and increases in current liabilities. In December 2000, the Company entered into a purchase agreement with our laser diode chip supplier requiring minimum purchases by the Company of approximately $66.7 million through December 31, 2002.

Cash Flow from Investing Activities Cash used in investing activities totaled $3.4 million and $10.2 million for the nine months ended September 30, 1999 and 2000, respectively. The increase resulted from expenditures on property, plant and equipment, including new manufacturing facilities. Cash used in investing activities totaled $1.3 million, $3.1 million and $5.2 million for the years ended December 1997, 1998 and 1999, respectively. We expect to acquire a 51% interest in NTO IRE-POLUS for $5.0 million. Although we may use a portion of our cash resources to acquire additional technology or businesses that are complementary to our business, we have no current plans to do so. We expect that our capital expenditures through the end of 2002 will consist primarily of:

. approximately $20.0 million for the acquisition of land and the construction of buildings in the United States and Germany;

. approximately $15.0 million for the automation and improvement of our manufacturing processes; and . approximately $45.0 million for the acquisition of property, plant and equipment to furnish and fit the new facilities in the United States, Germany and Italy.

Cash Flow from Financing Activities Cash used in financing activities totaled $11,000 for the nine months ended September 30, 1999 while cash provided by financing activities totaled $72.8 million for the nine months ended September 30, 2000. Cash provided by financing activities totaled $1.3 million, $2.0 million, and $585,000 for the years ended December 31, 1997, 1998 and 1999, respectively. Cash generated by financing activities in 2000 was primarily due to the gross proceeds from the Series A preferred stock of $5.0 million and the gross proceeds from the Series B preferred stock and common stock warrants of $75.0 million through September 30, 2000. An additional $20.0 million was raised from the sale of Series B preferred stock subsequent to September 30, 2000. As part of the restructuring of the IPG Group, we acquired IPG Laser, requiring the payment of approximately $9.9 million to certain stockholders. As part of the initial restructuring transaction, we issued 1,150,000 shares of our common stock to one stockholder. The completion of this restructuring in October 2000 resulted in the issuance of an additional 1,403,000 shares of our common stock.

We have several construction loans and revolving credit facilities with banks in the United States and Germany. As of November 30, 2000, we owed $12.2 million under these facilities and we had total available credit of $26.9 million. These loans have been used principally to finance our new facilities, purchase related equipment and for working capital purposes. These loans are secured by all of our assets and outstanding borrowings bear interest at a weighted average rate of 4.56%. These loans are cross-defaulted and contain restrictive covenants, including maintenance of specific financial ratios, including the ratio of total debt to tangible capital and the debt service coverage ratio. Subsequent to September 30, 2000, the Company placed $12,560,000 in a restricted overnight investment account which is available to the bank to offset the Company's obligations under the facilities.

We believe that the net proceeds from this offering, along with the cash raised in the third and fourth quarters of 2000 in private equity financings, our cash flows from operations and borrowings available under our credit facilities will provide us with sufficient liquidity to meet our current and anticipated financial obligations, committed capital expenditures and other needs through 2001. However, our future growth, including potential acquisitions, may require additional funding. If cash generated from operations is insufficient to satisfy our long-term liquidity requirements, we may need to raise capital through additional equity or debt financing or additional credit facilities. If additional funds are raised through the issuance of securities, these securities could have rights, preferences and privileges senior to holders of common stock, and the terms of any debt facility could impose restrictions on our operations. The sale of additional equity or debt securities could result in additional dilution to our stockholders, and additional financing may not be available in amounts or on terms acceptable to us, if

at all. If we are unable to obtain this additional financing, we may be required to reduce the scope of our planned product development, marketing efforts and facilities expansion which could harm our business, financial condition and operating results.

Qualitative and Quantitative Risk Disclosures about Market Risk Interest Rate Sensitivity We currently maintain our funds primarily in money market funds. We do not have any derivative financial instruments. We plan to invest a significant portion of our existing cash, together with net proceeds from the offering, in interest bearing, investment grade securities, with maturities of less than twelve months.

Our long-term indebtedness in the United States is subject to periodic interest rate adjustments, while our debt in Germany is comprised primarily of fixed-rate instruments. The interest accruing on some of these fixed rate loans is lower than current market rates due to government subsidy programs.

We do not believe that our investments, future investments or our indebtedness, in the aggregate, will have significant exposure to interest rate risk.

Exchange Rate Sensitivity We currently have operations in the United States, Italy, Germany and Russia. Our non-U.S. subsidiaries record transactions in the local currency of the country in which they are located. A significant portion of sales and cost of sales of our non-U.S. subsidiaries are U.S. dollar denominated. To comply with local reporting requirements, these amounts are converted for book purposes into local currency at the time of sale. We reconvert these amounts to U.S. dollars for financial reporting purposes. Consequently, we are subject to foreign currency exchange rate fluctuations for financial reporting purposes. In addition, a majority of the expenses of non-U.S. subsidiaries are paid in local currencies which subject us to exchange rate risk.

We have historically not utilized any derivative instruments or other measures to protect us against foreign currency fluctuations. We will continue to analyze our exposure to currency fluctuations and may engage in financial hedging techniques in the future to attempt to minimize the effect of these potential fluctuations; however, exchange rate fluctuations may adversely affect our financial results in the future.

Recent Accounting Pronouncements In June 1998, the Financial Accounting Standards Board, or the FASB, issued SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities. This Statement establishes accounting and reporting standards requiring that every derivative instrument (including certain derivative instruments embedded in other contracts) be recorded in the balance sheet as either an asset or liability measured at its fair value. During June 1999, the FASB issued SFAS No. 137, Accounting for Derivative Instruments and Hedging Activities, Deferral of the Effective Date of FASB Statement No. 133, to defer the effective date of SFAS No. 133. SFAS No. 133 will now be effective for IPG Photonics beginning January 1, 2001. Because we do not utilize derivative instruments for hedging purposes or interest rate management, we believe that the adoption of SFAS No. 133 will not have a significant impact on our financial condition or results of operations.

Business

We design, manufacture and sell high performance fiber amplifiers, Raman pump lasers and fiber lasers for telecommunications and industrial applications. Our proprietary technology, materials science expertise and vertically integrated manufacturing operations enable us to produce cost- effective, high and low power fiber amplifiers and lasers with high power efficiency, and improved signal to noise performance, reliability and quality that operate over a wider range of the usable optical spectrum. Our telecommunications products are used in the long-haul, metropolitan and access segments of optical communications networks. Our telecommunications customers include ADC, Agilent, Alcatel, Calient, Corning, Corvis, Hughes Space and Communications, JDS Uniphase, Lucent, MIT Lincoln Labs, Nortel, Optical Crossing, Siemens and TeraBeam Networks. Our industrial products are used for marking, printing, materials processing, micro-machining, optical sensing and measurement, and laboratory and medical equipment. Our industrial customers include Antares Laser Baasel Scheel Lasergraphics, DaimlerChrysler Aerospace, GSI Lumonics, L.O.T. Oriel, Molecular OptoElectronics, Purup Escofot and Sunx.

Industry Background

Fiber optic technologies have advanced significantly over the last several years. These technologies have led to the recent development of cost- effective fiber amplifiers and fiber lasers that have enabled significant breakthroughs in telecommunications networks and industrial applications.

Telecommunications

The rapid growth in the worldwide volume of data, voice and video traffic is placing unprecedented stress on existing communication networks. According to RHK, Internet traffic is projected to increase from 0.4 million terabytes, or trillions of bytes, per month at the end of 1999 to over 15 million terabytes per month in 2003.

With the increasing demands on communication networks for data transmission capacity, or bandwidth, telecommunications service providers have sought technological solutions to upgrade and expand their networks to provide greater bandwidth at reduced costs. Most existing communications networks were originally designed to convey voice traffic by means of electronic signals over copper wires, which have limited capacity to handle ever increasing data streams at high speeds. By contrast, optical signals traveling at the speed of light through thin glass fibers can carry a significantly higher rate of data over far greater distances in comparison to electronic signals over copper wires.

The fiber optic communication market can be divided into three segments, each of which requires customized solutions. These are the long-haul, metropolitan and access segments. The long-haul segment of the optical network transmits data over large geographical areas, typically over 100 miles, and connects major city centers or traffic hubs. The metropolitan segment of the optical network connects telecommunications switching stations, or exchanges, which receive, identify and route incoming signals to other exchanges within a metropolitan area. The access segment of the optical network carries signals from exchanges to the junction boxes at the curbside and from there to office complexes or directly to both business and residential end-users and enables enterprises and

communication providers to interconnect various network systems. The access segment consists of high density urban systems, low density suburban systems and free space optical networks. Free space optical networks typically transmit light waves from building to building over relatively short distances, such as three miles without the use of optical fiber. The following graphic depicts the communication network market segments:

[We will insert here a diagram that graphically shows the long-haul, metropolitan and access segments of optical communications networks.]

Telecommunications service providers first deployed optical communication technology in the long-haul segment, and are now deploying new fiber optic technologies not only in this segment, but also in the metropolitan and access segments. Although there have been significant increases in bandwidth in the long-haul segment of the communications network, bandwidth limitations and capacity bottlenecks still exist in the access segment. The adoption of fiber optic technologies in the metropolitan segment has been limited in part by the lack of low cost, high performance optical amplifiers. However, these amplifiers are now being offered by a number of manufacturers. According to RHK, the market for fiber amplifiers used in the metropolitan segment is expected to grow from $637 million in 2000 to $1.5 billion in 2004 representing a compound annual growth rate of 23.9%. The market for amplifiers used in the access segment is expected to grow from $114 million in 2000 to $761 million in 2004, representing a compound annual growth rate of 60.7% In fiber optic networks, optical signals are transmitted at specified wavelengths within specified ranges, or bands. Most fiber optic networks use the C band and the L band. Companies in the optical communications industry are seeking to expand the number of bands for fiber optic communications, such as the S band and other bands within the useable optical spectrum as illustrated in the chart below.

[We will insert here a diagram that shows the useable portions of the optical spectrum.]

In early systems, optical signals were transmitted over each fiber using only one wavelength. An innovative technology, called wavelength division multiplexing, or WDM, allows optical signals of different wavelengths to be transmitted simultaneously through a single fiber. As signals travel through the fiber they have a tendency to be dispersed in the fiber. To protect against multiple signals dispersing into each other, the wavelengths used to transmit signals are separated from each other by a minimum number of unused wavelengths, forming a buffer in which the signals are not transmitted. Technological advances, such as dense wavelength division multiplexing, or DWDM, have led to narrower channel widths, or spacing, thereby increasing the number of signals that can be carried by each fiber. Further advances in this technology are expected. Bandwidth increases can also be generated by increasing the rate at which data is transmitted, also known as modulation speed, rather than spacing channels more narrowly. The increasing use of DWDM, continued narrowing of channels and increases in modulation speeds have made fiber optic amplification more complex and critical.

Development of the fiber amplifier has been a critical enabler of the implementation of DWDM technology in communications networks. The distance that an optical signal can be transmitted is limited by losses in signal strength, or attenuation, caused by absorption and scattering of light in the fiber, as well as by losses to the signal as it passes through optical components in the network, or

insertion loss. Prior to the invention and deployment of the fiber amplifier in optical networks, optical signal strength could only be regenerated by conversion of the optical signal to an electronic signal for amplification, followed by reconversion to an optical signal. The equipment used to convert optical signals to electronic signals, known as opto-electronic regenerators, is expensive to procure, install and maintain. On the other hand, fiber amplifiers with high power and high performance, measured by signal to noise ratio, allow transmission of optical signals over longer distances without conversion. In addition, a fiber amplifier can handle a wide variety of transmission speeds and networking protocols, allowing for upgrades of the network without replacement of the amplifier. Fiber amplifiers are also capable of amplifying multiple wavelengths at the same time, making them far more cost- effective for DWDM applications. The two most common types of optical amplifiers are erbium-doped fiber amplifiers, or EDFAs, and Raman amplifiers.

EDFAs use the light from semiconductor laser diode modules to introduce, or pump, optical energy into doped fiber, resulting in signal amplification as the signals pass through the doped fiber. Doped fibers are fibers in which small quantities of rare earth ions and other elements are introduced. Multiclad fibers consist of layers of various glass compositions, some of which are doped with rare earth ions and other elements. Multiclad fiber is designed to optimize the absorption and transfer of energy from laser diode modules to the input signals. RHK estimates that revenue from the sale of erbium gain modules, the component of EDFAs in which amplification is achieved, was $641 million in 1999 and will increase to $4.2 billion in 2004, representing a compound annual growth rate of 45.3%.

There are two types of laser diodes that are used in EDFAs: single mode and multimode. Compared to single mode diodes, multimode diodes have a larger surface area from which light is emitted, resulting in higher output power with lower power density substantially improved reliability and longer lifetime expectancy. There are also two types of fiber for transmission: multimode and single mode. Multimode fiber is more efficient with a greater capacity to collect light energy than single mode fibers, while single mode fiber generally experiences less signal attenuation and distortion making it significantly more efficient for long distance transmission of signals and high data transmission rates. We believe that a majority of all fiber currently deployed in communications systems is single mode fiber. Technological advances have made it possible to pump single mode fiber with multimode diodes, which we believe is optimal for many applications.

In addition to EDFAs, other significant innovations are being introduced to improve the amplification of optical signals in DWDM networks. A significant example is the introduction of Raman pump lasers, which are used to pump energy into the transmission fiber itself to amplify the optical signal, a process called Raman amplification. Currently, Raman technology has been deployed on a limited basis in the long-haul and ultra long-haul systems. RHK estimates that sales of Raman gain modules will grow from approximately $18.0 million in 2000 to approximately $1.0 billion in 2004 representing a compound annual growth rate of 173.1%. By achieving amplification throughout the transmission fiber rather than boosting the signal at one point, Raman amplification results in greater signal integrity. The use of Raman amplification coupled with EDFAs allows for greater spacing between amplifiers resulting in greater network efficiency. However, due to limitations in flexibility and applications, Raman amplification will continue to be a complementary technology to EDFAs rather than a disruptive one.

Industrial

Light emitted by a laser can be harnessed for numerous industrial applications, including marking, material processing, printing, micro- machining, medicine, instrumentation, optical storage, inspection, measurement and control, bar-coding and scanning. The characteristics of industrial lasers enable manufacturers to cut, weld, etch, polish, mark and measure without physical contact in many applications, permitting higher processing speeds, greater precision and lower overall manufacturing costs than conventional manufacturing processes. Consequently, manufacturers and others have significantly increased their use of lasers for industrial and other commercial applications. The global industrial laser market had total revenues in 1999 of approximately $1.7 billion according to Laser Focus World, a leading industry publication, and is growing at a rate of 30-35% per year.

Most industrial lasers in use today are based on gas or solid state technologies. Lasers are categorized by the different modes by which they deliver light energy. In continuous wave, or CW, lasers, the laser beam has a stable average power. In pulsed beam lasers, the laser delivers short pulses of light. Historically, pulsed beam lasers have been used in industrial applications where very high peak power is required. The most common conventional lasers are Nd doped crystal YAG lasers. Conventional lasers, however, have significant shortcomings. Integration of conventional lasers systems into industrial applications is complex and expensive, requiring free- standing cooling systems, a high power electrical supply and significant installation space. The complexity of these lasers requires specially trained personnel to operate and maintain them. Conventional lasers are large and operate from fixed positions requiring complex optics for beam delivery. In addition, limitations on the lasers themselves, such as inefficient conversion of electrical power to light, poor beam quality and limited life expectancy continue to reduce their functionality.

Many users are replacing conventional lasers with fiber lasers in industrial applications. They offer cost-effective alternatives to conventional laser technologies because of their lower operating costs, smaller size, higher reliability, greater efficiency, service-free operation and their ability to use conventional electrical outlets. For example, fiber lasers provide significantly better beam quality with precision micro-dot capability making them particularly useful for marking and other applications. In addition to the qualities mentioned above, their flexible fiber delivery and portability allow for use in new applications, such as underwater welding and industrial cleaning for which conventional lasers cannot be used.

Challenges Faced by our Customers Many telecommunications system integrators purchase optical components and modules which allow them to focus on designing systems that satisfy the growing performance demands of telecommunications service providers, such as AT&T, WorldCom, Deutsche Telekom, Sprint and Bell South. In addition, specific technological complexities of the long-haul, metropolitan and access segments require customized optical solutions.

Our telecommunications customers have the following needs:

. Higher Power Amplifiers. In the long-haul segment, higher DWDM channel counts require higher power. In the access segment, our customers require high power multiple output fiber amplifiers to power fiber-to-the-curb applications and hybrid analog and digital cable television systems with many

end users. Emerging applications, such as free-space optical communications require amplifiers with greater and variable power output which can respond automatically to different weather conditions.

. Greater Bandwidth and Transmission Rates. The high costs of building and operating new telecommunications networks provides incentive to maximize the data that can be sent through new networks as well as over existing fiber networks. Telecommunications systems integrators are continually looking for optical amplifiers that incorporate a wider range of the useable optical spectrum, operate over more narrowly spaced channels and at higher data transmission rates, or modulation speeds.

. High Reliability. Telecommunications service providers seek more reliable optical components to decrease the likelihood of system downtime. There is a strong demand for optical amplifiers that operate without maintenance for a decade or longer under various climactic conditions and resist technological obsolescence.

. Superior Performance. Telecommunications networks must maintain high signal to noise ratios as signals pass through amplifiers. Some telecommunications systems integrators also require polarization- maintaining amplifiers.

. Economically-Priced Low Power Amplifiers. Telecommunications service providers seek cost-efficient, low power amplifiers to eliminate bandwidth bottlenecks in the metropolitan and access segments. Both metropolitan WDM and fiber-to-the-desk applications require a large number of fiber amplifiers driving the need for decreased amplifier costs.

. Scalable and High Capacity Production. Telecommunications systems integrators demand that manufacturers of new customized optical amplification products scale their production more rapidly to deliver high volumes of quality products with shorter delivery times.

Our industrial customers have the following needs:

. Performance. Industrial customers require lasers that generate high quality light beams at several different wavelengths with wide modulation bandwidths and that allow for precise control of numerous operating specifications, including power output, pulse rate, pulse duration and beam width.

. Lower Total Cost of Ownership. Industrial customers desire high power lasers that are less expensive to purchase and maintain, and have longer life and greater reliability.

. Flexible Use and Ease of Integration. Industrial customers demand lasers that can be easily and flexibly integrated into their production processes, and that are easy to use, with no service requirements. Additionally, industrial customers require portable fiber lasers for new applications.

The IPG Solution

We design, manufacture and sell high performance fiber amplifiers and Raman pump lasers for telecommunications applications and high power fiber lasers for various industrial applications. Our fiber amplifiers and Raman pump lasers cost-effectively address the needs of telecommunications customers by enabling transmission over a broader range of the useable optical spectrum with a higher

signal to noise ratio and improved reliability at high power outputs. We also supply high power fiber lasers with high beam quality, high efficiency and lower device cost that can be more easily integrated into industrial production processes than conventional lasers. We have based the design of our product lines on our innovative proprietary technology platform, key characteristics of which are simplified design and the high reliability of the common components that the different products share.

The success of our solution is based upon the following key attributes:

. Advanced Technology Platform. Our state-of-the-art products are based on our innovative proprietary technology platform. We believe that our design of critical specialty components, such as doped fibers and specialty couplers, together with our innovative approach in combining these components, allows us to cost-effectively create fiber amplifiers and fiber lasers that operate over a broader range of the optical spectrum, with higher power output, superior performance and greater reliability. For example, we have developed a pumping technology that allows us to efficiently use a greater number of diodes in our fiber amplifiers, thereby producing higher output power than achievable through traditional techniques. A key element of this technology is our ability to pump our proprietary single mode fibers with multimode diodes.

. Materials Science Expertise. Our expertise in non-radiative energy transfer between rare earth ions in solid state materials is the basis for the proprietary doping techniques used in manufacturing our multi-clad fibers for our fiber amplifiers and fiber lasers. Use of these proprietary fibers facilitates our innovative pumping technology and allows us to provide a wide variety of innovative fiber devices in numerous customizable configurations.

. Simplified Integrated Design. The simplified integrated product design used in our fiber amplifiers and fiber lasers employs fewer components than the products of our competitors. Our multi-disciplinary scientific teams design our products to decrease the complexity and cost of manufacturing, testing time, integration and the time needed to develop new products. It also improves yield, increases product reliability and allows quicker ramp-up of new production.

. Vertically Integrated Manufacturing. We design and manufacture a significant majority of the critical specialty components and modules used in our products. In addition, we perform all of our manufacturing and assembly in-house, including pre-form doping, specialty fiber drawing, laser diode module production and gain block assembly. Our in-house manufacturing helps us increase the performance facilitates and accelerates new product development, provides us with an assured supply of the high power fiber optic components used in our products, lowers our total cost and increases product reliability. As a result of this vertically integrated manufacturing, we can better meet the needs of our telecommunications customers and industrial users by quickly providing them with new and customized fiber optic devices.

. Quality-Driven Manufacturing. We test and qualify all of our components and assemblies, as well as our finished products, to assure reliability and performance. For example, we test our laser diodes for up to 1,000 hours under high stress conditions before we install them in our fiber amplifiers and fiber

lasers and employ a testing database for assessing the operational lifetime of principal components. With a large in-house testing facility, we are able to quickly scale our production output while continuing to assure high quality for new products.

The IPG Strategy

Our objective is to be the leading supplier of fiber amplifiers, Raman pump lasers and fiber lasers to our telecommunications and industrial customers. Key elements of our strategy include:

. Extend Our Existing Technology Leadership. Dr. Valentin P. Gapontsev, our founder, leads our scientific team, more than 30 of whom hold Ph.D. degrees, in the development of new technologies to differentiate our products and extend our competitive advantage. Our extensive, multi-disciplinary technical expertise has enabled us to develop proprietary pumping techniques and multi-clad fiber designs. Our key technological innovations have allowed us to become a leader in the design of fiber amplifiers, Raman pump lasers and industrial fiber lasers. For example, we sold our first Raman pump laser over three years ago, which we believe was the first commercial Raman pump laser sold in the industry. We plan to extend our technological leadership through continued enhancement of our existing technologies and the development of new technologies that enable optical networks to use higher data transmission rates and a broader range of the optical spectrum to achieve increased bandwidth.

. Expand and Enhance Our Existing Line of Products. We plan to expand and enhance our broad product line. By offering a broad array of products, we are able to serve numerous customers across all segments of the telecommunications market. Our current development efforts are focused on the introduction of cost-effective, low power fiber amplifiers for the metropolitan and access markets, the extension of our Raman technology and the introduction of fiber amplifiers that cover a broader range of the optical spectrum. We also intend to leverage our technological expertise in fiber lasers to extend our product line into new industrial applications.

. Expand Our Manufacturing Capacity and Reduce Costs. We plan to significantly increase our manufacturing capacity in the United States, Germany, Italy and Russia over the immediate and long term. Also, we intend to continue to invest in automation of component manufacturing and device assembly and testing to reduce manufacturing costs and increase product quality. Our simplified product design will allow us to employ a higher degree of automation, thereby improving productivity. We intend to manufacture additional critical components that we currently purchase from third parties in order to lower costs, ensure component quality and assure supply.

. Expand Our Sales and Marketing Efforts. We plan to expand our sales and marketing efforts for our telecommunications and industrial products, including the hiring of marketing executives with significant experience in the fiber optics industry. We also plan to open two additional sales offices in the United States in 2001, and to increase our worldwide distributor network. We believe that we have significant opportunities to target new customers, and to strengthen our relationships and increase our sales to existing customers.

. Provide Our Customers With a High Degree of Technical and Engineering Support for Customization. Our experienced staff of multi- disciplinary scientists and engineers works closely with our customers at the conceptual stage of the product development cycle to quickly customize our products or create new products that meet our customers' specific requirements. We will continue to utilize this knowledge and approach to respond more effectively with products that meet our customers' needs.

. Acquire Strategic Businesses and Technologies. We intend to pursue strategic acquisitions of businesses and technologies that can provide us with key intellectual property, strategic products and highly qualified personnel to rapidly increase our technological expertise and expand the breadth of our product portfolio. Currently, we have no commitments or agreements for any material acquisition of, or investment in, any third party, other than our proposed 51% investment in NTO IRE-POLUS, an affiliated company located in Russia. We will explore joint ventures in other countries, where appropriate, to take advantage of improved cost structures and local partners who will help in developing new markets for our products.

Products

Our products are classified in two major groups: high-performance fiber amplifiers, Raman pump lasers and fiber lasers for telecommunications and high-power fiber lasers for industrial applications. These products are based upon a common technology platform and are manufactured using a set of substantially similar key components.

Optical Amplification Products For Telecommunications Applications We design and manufacture a full range of fiber amplifiers and Raman pump lasers with varying output power and wavelengths that enhance data transmission in current and next generation optical networks. We believe our line of fiber amplifiers and Raman pump lasers offers the best commercially available output power and performance, including wavelength range, reduced dispersion, polarization maintenance, signal to noise ratio, reliability under high stress operating conditions and electrical efficiency. The power output from the products in this line ranges from 10 milliWatts to 15 Watts. Our amplifiers operate across the C and L bands and we are testing products for the S band as well as the superwide band, which encompasses the C and L bands. Our product line of over 80 fiber amplifiers and Raman pump lasers, for use in single channel, WDM and DWDM networks, are customized and optimized pursuant to the customers' price-performance criteria for a variety of telecommunications applications. We offer a broad range of products as illustrated by the following table:

		Single Channel/WDM		DWDM	
Markets Served	Spectral Range	Wavelength Range	Power	Wavelength Range	Power
EDFAs					
Long-Haul	C band	1528-1567 nm	10 mW-2 W	1528-1564 nm	10 mW-1 W
	L band	1565-1620 nm	10 mW-2 W	1565-1605 nm	10 mW-1 W
	Superwide band (Testing)	1530-1610 nm	100 mW-2 W	1530-1600 nm	10 mW-500 mW
	Pre Amplifiers				
Metropolitan Access	L band	1565-1620 nm	10 mW-200 mW	N/A	N/A
	C band	1533-1567 nm	10 mW-1 W	N/A	N/A
	L band	1565-1620 nm	20 mW-1 W	N/A	N/A
Access-Free-Space	C band	1535-1567 nm	300 mW-15 W	1538-1567 nm	500 mW-10 W

Optical Communications	L band	1565-1620 nm 100 mW-10 W	1565-1605 nm 100 mW-5 W
Polarization Maintaining Amplifiers	C and L bands	1528-1620 nm 10 mW-10 W	1528-1620 nm 10 mW-10 W
Raman Pump Lasers			
Long-Haul		1240-1500 nm 500 mW-10 W	1240-1500 nm 500 mW-10 W

Legend: nm = nanometer; mW = milliwatt; and W = Watt.

Long-Haul Networks

Our high power EDFAs and Raman pump lasers provide the minimal signal distortion, high power output and reliability and the low power consumption needed for applications, such as submarine systems and high capacity long-haul optical communications systems. Our Raman pump lasers comply with Telcordia, formerly Bellcore, standards and are offered in various wavelengths and output powers which may be selected by our customers. We offer products that operate across the current optical spectrum used for optical long-haul communication with high power and a high signal to noise ratio. In addition, we sell EDFAs, fiber lasers and tunable fiber lasers for designing and testing DWDM optical systems. We also produce polarization--maintaining EDFAs that offer high signal to noise ratios over greater distances.

Metropolitan Networks We provide low-power EDFAs for both single channel and WDM applications for the metropolitan market segment. This market segment is growing rapidly, with emphasis shifting from single channel systems to WDM systems. The design of our products in this area as well as our manufacturing flexibility should allow us to respond to the dynamics of this market segment.

Access Networks

We offer low to high power digital single channel WDM EDFAs, analog multi-port EDFAs and multi-fiber/multi-channel EDFAs for use in the local access segment, including hybrid analog and digital cable networks, fiber-to- the-curb and fiber-to-the-home networks that provide high speed data, voice and video transmission in one cable. Our high power, multiport EDFAs provide cost- effective connectivity to a greater number of end-users reducing the number of amplifiers previously needed to supply high bandwidth requirements in access networks.

Free-Space Optical Networks We provide products for building to building data transmission up to 10 gigabits per second over distances of up to three miles without the use of a fiber optic cable connecting the buildings. We provide eye-safe high power EDFAs, transmitters and subsystems for deployment in both point-to-point and point-to-multipoint free-space optical networks. Our products offer a wide dynamic range, automatically adjusting power output to ensure reliable signal transmission through adverse weather conditions, such as fog and rain. In addition, free space optical technology has potential applications for satellite-based communications. In this regard, we have developed polarization maintaining fiber amplifiers that can be used in sophisticated optical satellite networks.

High-Power Fiber Lasers for Industrial Applications We design and manufacture high power, continuous wave and pulsed fiber lasers for industrial applications. This product line includes lasers with a high pulse repetition rate, high electrical efficiency, low cost, small size, a mobile and flexible delivery system and reliable service-free operation. We believe that we are the sole manufacturer of

many kinds of commercially available fiber lasers for numerous industrial applications. Our products are customized and optimized pursuant to the customers' price/performance criteria. We sell a broad range of products for various industrial applications as illustrated by the following table:

Markets Served	Product	Pulsed/Continuous Wave (CW)	Spectral Range	Power
Marking	Ytterbium-doped fiber laser	Both	1.04 Um-1.15 Um	5 W-50 W
High Speed Printing	Ytterbium-doped fiber laser	Both	1.07 Um-1.10 Um	10 W-20 W
Material Processing	Ytterbium-doped fiber laser	Both	1.06 Um-1.12 Um	5 W-100 W
	Erbium-doped fiber laser	CW	1.54 Um-1.57 Um	1 W-50 W
Micromachining	Ytterbium-doped fiber laser	Both	1.05 Um-1.12 Um	1 W-10 W
	Erbium-doped fiber laser	CW	1.54 Um-1.57 Um	1 W-10 W
	Raman fiber lasers	Pulsed	1.10 Um-1.25 Um	1 W-5 W
Optical Sensory/ Measurement	Tunable Erbium-doped fiber laser	CW	1.53 Um-1.61 Um	100 mW-10 W
	Tunable Yterbium-doped fiber laser	CW	1.04 Um-1.10 Um	100 mW-10 W
	Single-frequency Ytterbium-doped fiber laser	CW	1.05 Um-1.10 Um	1 W-5 W
Laboratory/Medical	Ytterbium-doped fiber laser	Both	1.02 Um-1.12 Um	500 mW-50 W
	Erbium-doped fiber laser	Both	1.53 Um-1.62 Um	20 mW-10 W
	Raman fiber laser	CW	1.15 Um-1.50 Um	500 mW-10 W
	Fiber-pigtailed laser diode systems	CW	0.97 Um	5 W-20 W

Legend: Um = micrometer; W = Watt; mW = milliWatt; and MOPFA = master oscillator power fiber amplifier.

Marking

Lasers are used to precisely mark a wide variety of surfaces at high speed without contact by changing the surface structure of the material. We produce high-energy pulsed ytterbium-doped fiber lasers, as well as CW fiber lasers with external modulation, that are substantially faster, more precise, more reliable, smaller and more cost-effective than conventional gas and solid state lasers. Our fiber lasers have high beam quality and micro-dot marking capability that enables accurate identification and retrieval of marked items in automated assembly lines.

High-Speed Printing

High-speed laser plate and film writing systems enable printers to write high-resolution color images directly from computer files onto a printing press plate or onto film, thus resulting in significant time and cost savings for commercial printers. We believe our product is the first to provide operating modulation bandwidth of up to 200 MHz. Our ytterbium-doped fiber lasers also offer features such as high beam quality, electro-optical efficiency, compact size, durability and ease of integration in new or existing printing systems where the laser component can be easily replaced.

Material Processing

Lasers are used in a variety of material processing applications, including welding, cutting, drilling, soldering and heat treating. Our fiber lasers offer the high-power and portability necessary for complex tasks such as diamond cutting and underwater repair of pipelines, hulls of ships or other marine installations, and, we believe, enable several new applications.

Micromachining

Our fiber lasers are used in systems by semiconductor manufacturers to repair defective or redundant circuits in memory chips with precise laser pulses. Our lasers can also be used for micromachining for the precise trimming of components in printed circuit boards and in the manufacture of semiconductors. Our fiber lasers provide a wide range of operating wavelengths, high levels of precision, high power and reliability needed for these applications.

Optical Sensory and Measurement We sell fiber lasers for light detection and ranging, known as lidar, tunable lasers, single frequency lasers and specialty lasers for various sensory and measurement applications. These applications include obstacle- warning, 3-D optical radar, range finding, imaging and sensing for the aviation industry and pollution and atmospheric data measurement, data on road traffic flow, velocity control and security installations.

Laboratory and Medical Applications We provide a wide range of fiber lasers and other optical products for use in various medical applications, such as medical imaging, surgery, microsurgery, therapy and dentistry. We believe our fiber lasers outperform conventional lasers for medical applications, combining a wide choice of operating wavelengths, compact size, flexible fiber delivery, precise control and tunability. Another benefit of these lasers is ease of use by doctors and reduced patient trauma.

Research and Development We have assembled a team of scientists and engineers with specialized experience and extensive knowledge in fiber optic amplifiers and fiber lasers, and in manufacturing process design. Our research and development team includes over 30 scientists who hold Ph.D. degrees and over 50 additional scientists and engineers. We undertake research and development at our facilities in Sturbridge, Massachusetts; Burbach, Germany; and Friazino, Russia.

We are developing new lines of fiber amplifiers using fibers doped principally with rare earth ions other than erbium. Some of these are currently being tested. Other products under development include Raman amplifiers, and a variety of industrial lasers such as green lasers and picosecond lasers among others. Our future success depends on our ability to continue to extend our existing technological leadership and to develop new products that maintain technological competitiveness. We work closely with our telecommunications and industrial customers to monitor changes in the marketplace and to develop new products to address their needs. For example, our fiber amplifiers and free-space optical transmitters are the only products of their kind to be qualified for use by Bosch Telecom and Motorola after extensive tests for Teledesic, a global satellite project, which is currently awaiting funding. We plan to focus our product development activities on improving our existing products, customizing products to client specifications and developing innovative new products. We plan to direct part of our resources to fundamental research in related fields to maintain our technological leadership.

Customers

We sell our products to customers located in the U.S., Europe and Asia. The following is a list of customers who have purchased more than $100,000 of our products from us or our distributors from January 1, 2000 through November 30, 2000 broken down by telecommunications and industrial

customers in alphabetical order:

. Telecommunications: ADC, Agilent, Alcatel, Calient, Corning, Corvis, Hughes Space and Communications, JDS Uniphase, Lucent, Marconi, MIT Lincoln Labs, Nortel, Optical Crossing, Siemens, T.E.M. and TeraBeam.

. Industrial: Baasel Scheel Lasergraphics, DaimlerChrysler Aerospace, GSI Lumonics, L.O.T. Oriel, Molecular OptoElectronics, Purup Escofot and Sunx.

In 1999, Marconi and Alcatel were our only customers that accounted for 10% or more of our total net revenues, with 40% and 10%, respectively. In the nine months ended September 30, 2000, TeraBeam Networks and Marconi were the sole customers who accounted for more than 10% of our sales, representing approximately 40% and 20%, respectively.

We exclusively provide to TeraBeam our EDFA products for point-to- multipoint free-space optical communication systems. This exclusivity expires on the earlier of September 15, 2002 or upon TeraBeam's failure to meet certain minimum purchase requirements.

Manufacturing

We manufacture our products and components at our facilities in the United States, Germany and Italy. Further, we source certain components from NTO IRE-POLUS, our Russian affiliate. Our Oxford, Massachusetts facility, due to be completed in the first quarter of 2001, will manufacture our entire range of products. We produce the majority of our critical specialty components internally, such as, specialty fiber couplers, isolaters, spectral filters, polarizers, collimators and optical terminators. Additionally, our vertically integrated manufacturing operations include pre-form doping, specialty fiber drawing, laser diode module production and gain block assembly. We also manufacture our own test instruments, diode test racks, assembly tools and machines according to our own designs.

Facilities

In the United States, we rent a 25,000 square foot facility that is used for sales and administration, manufacturing and research and development and contains 9,000 square feet of dust-free work environment. The lease is renewable in June 2001 for a period of one year. In the first quarter of 2001 we expect to complete the first phase of our new facility in Oxford, Massachusetts. This facility will consist of two buildings aggregating 72,000 square feet located on a 76 acre campus. Within these two buildings 10,000 square feet will be class 10,000 clean rooms and 32,000 square feet will be dust-free manufacturing rooms. The second phase of the Oxford facility includes an additional 120,000 square feet and we expect to commence its construction in 2001 shortly after completion of the first phase.

In Germany, we own a facility with approximately 23,000 square feet of manufacturing and research and development space. We are currently expanding the manufacturing capacity of our German facilities to add 24,000 square feet. This facility is expected to be completed in the first quarter of 2001. We are currently seeking land in Burbach to build additional facilities over the next several years.

In Italy, we rent a 3,000 square foot facility used for product assembly, manufacturing and testing and we plan to lease up to an additional 15,000 square feet of space in 2001. In Russia, NTO IRE-POLUS rents a 25,000 square foot facility used for manufacturing and research. They are currently negotiating the renewal of this lease, which expired in November 2000. NTO IRE- POLUS, plans to build an expanded facility over the next two years with the proceeds of our proposed investment. Our facilities in the United States and Germany are subject to security interests held by our lenders. We believe that our existing facilities and those nearing completion are adequate to meet our needs for the foreseeable future.

Quality

We test and qualify 100% of our internally manufactured and purchased components and finished goods and we plan to maintain this standard going forward. We currently have in-house testing facilities that use our internally manufactured testing equipment for assessing the operational lifetime of laser diodes. We test each laser diode upon receipt from the manufacturer for up to 1,000 hours, under the high stress conditions of elevated temperature and output optical power. We assign each laser diode to an appropriate application based on its performance during the test. We maintain a database and history of each laser diode chip and module tested. Currently, this database includes 40,000,000 real-time device hours of laser diode test data. We test all finished products for 200 hours for various performance criteria. In addition, we manufacture a substantial majority of our critical components in our various facilities in order to closely monitor our quality standards. We expect that increased automation will also contribute to an increase in the quality of our products.

We have established a quality management system to assure that the products we manufacture meet or exceed industry standards. This system is based on ISO 9000 standards. Our German facility has been ISO 9001 certified since July 2000.

Supply

Various outside suppliers provide us with raw materials and components. For some of these raw materials and components, we depend on a single or limited number of suppliers, but we are seeking additional suppliers in order to prevent interruptions or delays. We cannot assure you that we will obtain any additional sources of supply. We attempt to maintain surplus inventory to overcome shipping delays or supply interruptions and, to date, we have generally been able to obtain sufficient supplies in a timely manner.

Pursuant to a non-exclusive purchase agreement with SDL that terminates on December 31, 2002, we have agreed to purchase a fixed amount of laser diode chips that meet our specifications. We have agreed to pay SDL specified amounts if we fail to purchase required amounts each quarter and over the life of the contract to compensate SDL for its investment in equipment needed to meet our quantity requirements for laser diode chips. In addition, SDL has agreed to pay us a specified amount in the event they willfully breach their supply obligations to us. Other than our agreement with SDL, we do not have long-term agreements with our suppliers for any components.

Sales, Marketing and Technical Support We have one U.S. and two European sales offices. We plan to increase our sales and marketing staff and open two more offices in the U.S. and one in the U.K. within the next twelve months. To coordinate our sales and marketing efforts, we are seeking marketing executives with significant experience in the fiber optic industry.

In the telecommunications industry, our product specialists and engineers work with our customers to customize our products to their needs. Because the telecommunications industry is primarily comprised of a small number of large companies, our senior management has been responsible for our sales and marketing effort to these customers. Typically, these customers purchase a small quantity of our products on a trial basis for 6 to 9 months before they place larger orders. Compared to orders for our telecommunications products, orders for our industrial products tend to be smaller and the sales cycle tends to be faster. We currently use a number of distributors worldwide to help expand our sales and market penetration for both telecommunications and industrial customers. In addition, we believe the high level of technical support we offer provides us with a competitive advantage.

Our marketing efforts are focused on increasing awareness of our products and our brand name through our participation in major world trade fairs, conferences and exhibitions. We also publish papers in scientific journals and industry publications from time to time.

Competition

Our markets are highly competitive. In the telecommunications industry, we believe that our principal competitors are major manufacturers of fiber amplifiers, fiber lasers and related components. These manufacturers include Alcatel Optronics, Corning, JDS Uniphase, Lucent Microelectronics, Nortel, SDL, MPB, and Furakawa. JDS Uniphase and SDL have recently announced their agreement to merge. Our principal competitors in the industrial laser area include Coherent, SDL, Spectra-Physics and Optocom.

Most of our competitors have substantially greater financial, engineering and manufacturing resources as well as greater name recognition. Some of our customers compete with us and some may begin to compete with us. In addition, some of our customers have been or could be acquired by, or enter into strategic relations with, our competitors. We anticipate that further consolidation will occur in our industry, thereby possibly increasing competition in our target markets.

We believe the principal competitive factors of the markets in which we operate are:

. product price, features, functionality and reliability;

. performance characteristics;

. introduction of new and enhanced products before competitors;

. product line breadth;

. compliance with emerging industry trends and standards;

. service and support;

. manufacturing capacity and reliance upon outside suppliers;

. ability to respond to emerging technologies;

. brand recognition; and . access to new customers.

We believe we compete favorably with our competitors with respect to the foregoing factors. However, we cannot assure you that we will be able to compete successfully in the future.

Regulatory Matters

In most countries where our products are sold, our products must comply with the regulations of one or more governmental entities. These regulations often are complex and vary from country to country.

Depending upon the country and the relevant product, the applicable regulations may require product testing, approval, registration, marking, operating specifications and safety features.

In particular, some of our products are subject to U.S., German, Italian and Russian export control laws and regulations governing the export of products and components and the disclosure of technical information to foreign countries and citizens. These laws and regulations require licenses for the export of some of these products to, and disclosure of our technology in, some countries, including Russia. In addition, in some countries, including the United States, these laws and regulations require licenses for the disclosure of our technology to some of our employees who are not citizens of those respective countries. Moreover, these laws and regulations could change with little or no advance notice, such that items not now requiring licenses could thereafter require licenses. We have determined what we believe to be the proper classifications for all goods and technology that we export from the United States and elsewhere and believe them to be reasonable and proper. There always is the possibility, however, that if the U.S. government were to review these classifications, the U.S. government could determine that some or all are incorrect and would require export licensing for items that the company believes not to require licenses. Such action on the part of the U.S. government could prevent transfers of goods and technology while licenses are applied for and obtained, in some cases prevent specified transfers altogether, and result in penalties for past exports of misclassified items. If any or all of our classifications were not honored by the U.S. government, our manufacturing operations may be impaired, and we may face additional adverse consequences due to these laws and regulations.

Environmental Regulations We are subject to a variety of national and local laws and regulations concerning the storage, use, discharge and disposal of toxic, volatile, or otherwise hazardous or regulated chemicals or materials used in our manufacturing and assembly processes. Further, we are subject to other safety, labeling and training regulations as required by local, state and federal law. We believe that the Company is in substantial compliance with these regulatory requirements.

Intellectual Property We rely on a combination of trade secret law, contractual restrictions, trademark law and copyright law to establish and protect our proprietary rights in our technology and intellectual property. Historically, we have chosen to rely upon trade secrets and contractual restrictions, as opposed to patents, to protect our rights because of our limited resources. However, with the additional resources from this offering, we intend to reevaluate our strategy with respect to protecting our intellectual property portfolio. We require our key employees and consultants to execute non-disclosure and proprietary rights agreements. These agreements acknowledge our exclusive ownership

of all intellectual property developed by the individual during the course of his or her work with us and require that all proprietary information disclosed to the individual remain confidential. We believe that our design and manufacturing processes make it difficult and expensive, although not impossible, for others to reverse engineer our products. We have applied for registration of our IPG, IPG Photonics and IPG Laser names and marks in the Patent and Trademark Office and will apply in trademark offices elsewhere in jurisdictions where we have facilities. We intend, where appropriate, to enforce our intellectual property rights if infringement or misappropriation occurs.

The steps taken by us to protect our intellectual property may not prove sufficient to prevent misappropriation of our technology, deter independent third-party development of similar technologies or prevent reverse engineering of our products. In addition, we may have no legal recourse against those who successfully reverse engineer our products without misappropriation of our technology or violation of contractual or other legal prohibitions. Furthermore, the laws of certain foreign countries may not protect our technologies or intellectual property rights to the same extent as do the laws of the United States. The loss of the ability to use our technology could require us to obtain the rights to use substitute technology, which could be more expensive or offer lower quality or performance, and therefore could harm our business. In some cases, we may not be able to obtain such rights. Moreover, the fiber optic components and fiber laser industries are characterized by the existence of a large number of patents and frequent litigation based on allegations of patent infringement. Third-parties could claim infringement by us with respect to current or future technology.

Employees

As of September 30, 2000, we had 160 full-time employees, 32 of whom were engaged in product development, 100 in manufacturing, and 28 in sales, marketing, customer service, general and administration. A total of 53 employees were in the U.S. and the remainder are employed in Europe. NTO IRE- POLUS had a total of 242 full- and part-time employees. None of our employees are represented by a labor union. We have not experienced any work stoppages and we consider our relations with our employees to be good.

Legal Proceedings

We are not currently involved in any material legal proceedings, nor do we know of any pending material legal proceedings in which we may be involved.

Management

Directors, Executive Officers and Key Employees Our directors, executive officers and key employees are:

Name Age Positions with the Company Valentin P. Gapontsev, Ph.D. .. 61 Chairman of the Board of Directors and Chief Executive Officer Hon. John H. Dalton..... 58 President and Director Eugene Shcherbakov, Ph.D. ..... 53 Managing Director of IPG Laser and Director Timothy P. V. Mammen.....

31 Chief Financial Officer and Vice President John Geagea..... 46 Chief Operating Officer Benjamin Peng-Chih Li..... 38 Chief Technology Officer Denis Gapontsev, Ph.D. ..... 28 Vice President, Research and Development and Director Dennis Leonard..... 38 Director of Manufacturing Stefano Cecchi, Ph.D. ..... 44 Managing Director of IPG Fibertech Peter V. Mammen..... 68 Treasurer Paolo Sinni..... 49 Secretary and Controller Valentin Fomine, Ph.D. ..... 45 Department Head of IPG Laser Igor Samartsev..... 37 Director of Research and Development of IPG Laser Nicholai Platonov, Ph.D. ..... 44 Principal Scientist, Department Head of IPG Photonics Robert A. Blair..... 54 Vice Chairman of the Board of Directors Michael C. Child..... 46 Director William F. Krupke, Ph.D. ..... 63 Director VALENTIN P. GAPONTSEV, Ph.D. has been our Chief Executive Officer and Chairman of the Board of Directors since inception. Dr. Gapontsev founded the IPG Group with the creation of NTO IRE-POLUS, and has been President and Managing Director since its inception. Dr. Gapontsev has over thirty years of experience in the field of non-radiative energy transfer in rare earth ions and solid state materials and is the author of numerous scientific articles. In 1994, he founded IPG Laser, and in 1997, he founded IPG Fibertech. Dr. Gapontsev holds a Ph.D. degree in Physics from the Moscow Institute of Physics and Technology.

HON. JOHN H. DALTON has served as our President and as a member of our Board of Directors since September 2000. Mr. Dalton was appointed Secretary of the Navy by President Clinton in 1993 and served in that capacity until 1998. He served as Chairman of the Board of Directors and Chief Executive Officer of EPCAD Systems, a metal technology firm, from October 1999 until June 2000. He has been a member of the Boards of Directors of Transtechnology Corporation since April 1999; Fresh Del Monte Produce Inc. since May 1999; and Niagara Mohawk Holdings Inc. since June 1999. Mr. Dalton graduated with distinction from the U.S. Naval Academy and earned an M.B.A degree from the Wharton School of the University of Pennsylvania. He holds an honorary Doctor of Laws degree from Trinity College.

EUGENE SHCHERBAKOV, Ph.D. has served as the Managing Director of IPG Laser since August 2000 and has been a member of our Board of Directors since September 2000. Dr. Shcherbakov served as the Technical Director of IPG Laser from 1995 to August 2000. From 1983 to 1995, Dr. Shcherbakov was a senior scientist in fiber optics and head of the optical communications laboratory at the General Physics Institute, Russian Academy of Science in Moscow. Dr. Shcherbakov graduated from the Moscow Physics and Technology Institute with an M.S. in Physics. In addition, Dr. Shcherbakov attended the Russian Academy of Science in Moscow, where he received a Ph.D. in Quantum Electronics from its Lebedev Physics Institute and a Dr.Sci. degree in Laser Physics from its General Physics Institute.

TIMOTHY P. V. MAMMEN has been our Chief Financial Officer since July 2000 and a Vice President since November 2000. Previously, Mr. Mammen served as the Group Finance Director and General Manager of UK Operations for IP Fibre Devices Ltd. since May 1999. Mr. Mammen was Finance Director and General Manager of United Partners Plc, a commodities trading firm, from 1995 to 1999. Mr. Mammen received an Upper Second B.Sc. Honours degree in International Trade and Development from the London School of Economics and Political Science and is a Chartered Accountant and a member of the Institute of Chartered Accountants Scotland.

JOHN GEAGEA has been our Chief Operating Officer since June 2000. From 1987 to 2000, Mr. Geagea worked for Italtel S.p.a., a telecommunications company, in various capacities, including as Director of Russian Operations from 1994 to 1996, Director of the Socrates Project from 1996 to 1998, Director of International Industrial Activities from 1998 to 1999 and Director of Contracts Management from 1999 to 2000. Mr. Geagea holds a B.S. in Computer Engineering from the University of Illinois (Urbana-Champaign) and an M.S. in Electrical Engineering from the Illinois Institute of Technology.

BENJAMIN PENG-CHIH LI has been our Chief Technology Officer since July 2000. From 1991 to 1999, Mr. Li served as a Section Manager at SDL, Inc., a manufacturer of fiber optic components. He holds an M.S. in Electrical Engineering from the State University of New York at Stony Brook.

DENIS GAPONTSEV, Ph.D. has been our Vice President of Research and Development since August 2000 and has been a member of our Board of Directors since September 2000. From 1994 to 1996, Dr. Gapontsev worked as a scientist at NTO IRE-POLUS. He worked at IP Fibre Devices Ltd. from 1996 to 1998 and at IPG Laser GmbH from 1999 to 2000. In these positions he researched fiber lasers and Raman fiber lasers. Dr. Gapontsev holds a B.S. and an M.S. in Physics from the Moscow Physics and Technology Institute and a Ph.D. from the University of London.

DENNIS LEONARD has been our Director of Manufacturing since March 2000. Mr. Leonard was the Director of Manufacturing of Specialty Optics at Lucent Technologies (formerly SpecTran Specialty Optics Company), a corporation that produces fibers for communication, from 1997 to 2000. From 1993 to 1997, Mr. Leonard was the Director of Manufacturing of Laser Imaging Equipment at Gerber Systems Corporation, a corporation that develops and manufactures laser imaging systems. He holds a B.S. degree in Mechanical Engineering from Worcester Polytechnic Institute and an M.B.A. degree from Rensselaer Polytechnic Institute.

STEFANO CECCHI, Ph.D. has been the Managing Director of IPG Fibertech since its inception in December 1997. From 1992 to 1997, Dr. Cecchi managed the development and production of optical amplifiers and conducted research projects on components for fiber optic communications at Italtel S.p.a. He holds a Ph.D. degree in Quantum Optics from the National Institute of Optics of the University of Florence and conducted post doctoral scientific research on lasers and non-linear spectroscopy in Italy and abroad.

PETER V. MAMMEN has been our Treasurer since December 1998 and has been an adviser to the IPG Group since 1996. From 1989 to 1996, Mr. Mammen was Marketing Consultant to Francis Shaw & Company of Manchester, U.K. He holds a B.A. in Humanities from the University of Madras.

PAOLO SINNI has been our Secretary since August 2000 and our Controller since January 1999. He was the Controller of Technical Communications Corporation from 1993 to 1996, of Melles Griot, Inc. from 1996 to 1997 and of SpecTran Specialty Optics Company from 1997 to 1999. Each of these companies is in the fiber optics industry. Mr. Sinni holds a B.S.B.A. in Accounting from Nichols College.

VALENTIN FOMINE, Ph.D. has been a Department Head of IPG Laser since 1998 and previously as an Optical Engineer at NTO IRE-POLUS since 1990. Dr. Fomine received his Ph.D. specializing in radiophysics from the Institute of Radio Engineering and Electronics at the Russian Academy of Sciences. He received his undergraduate education at the Department of General Physics of Saratov State University, Russia.

IGOR SAMARTSEV has been the Director of Research and Development of IPG Laser since 1997 and has been employed as a scientist with NTO IRE-POLUS since 1990. He is a graduate of Chelyabinsk Physical Mathematical School and received a First Class degree from the Moscow Physical Technical Institute.

NICHOLAI PLATONOV, Ph.D. has been our Principal Scientist of IPG Photonics since October 2000. Dr. Platonov served as a scientist at IPG Laser from 1998 to 2000 and at NTO IRE-POLUS from 1996 to 1998. Dr. Platonov was a research scientist at the Institute of Radio Engineering and Electronics of the Russian Academy of Sciences from 1979 to 1996. He received his Ph.D. from the Institute of Radio Engineering and Electronics of the Russian Academy of Sciences and received his undergraduate degree from the Moscow Physical Technical Institute.

ROBERT A. BLAIR has been Vice Chairman of our Board of Directors since September 2000 and Chairman of our National Advisory Board since February 2000. He is currently the President of the Blair Law Firm P.C. Mr. Blair was an equity partner at Manatt, Phelps & Phillips, a law firm, from 1995 to 1999. He is a trustee under Winkler Trusts, which are the primary source of equity for, and owners of, real estate ventures developed by The Mark Winkler Company. Mr. Blair is managing partner of several real estate partnerships and has been a manager/principal in cellular telephone ventures. Mr. Blair holds a B.A. in Mathematics from The College of William and Mary and a J.D. from the University of Virginia School of Law.

MICHAEL C. CHILD has been a member of our Board of Directors since September 2000. Mr. Child has been employed by TA Associates, Inc., a venture capital investment firm, since July 1982 where he currently serves as a Managing Director. In addition, he has served as a member of the Board of Directors of Finisar Corporation, a producer of fiber optic subsystems and network performance test systems, since November 1998 and Fargo Electronics Inc., a developer, manufacturer and supplier of plastic card printers, since July 2000. Mr. Child holds a B.S. in Electrical Engineering from the University of California at Davis and an M.B.A. from the Stanford Graduate School of Business.

WILLIAM F. KRUPKE, Ph.D. has been a member of our Board of Directors since November 2000. Since May 2000, Dr. Krupke has been the President of Applied Lasers, a company which provides consulting services related to laser technology and applications, and he has served as a consultant to various companies that concentrate in those fields. From 1972 to 1999, Dr. Krupke served as Technical Manager for Lawrence Livermore National Laboratories, which provides research and development for the United States Department of Energy, and Deputy Associate Director of the laboratory's Laser Directorate. He received a B.S. degree in Physics from Rensselaer Polytechnic Institute and M.S. and Ph.D. degrees in Physics from the University of California at Los Angeles.

Our Chief Executive Officer, President, Chief Financial Officer, Treasurer and Secretary are elected by the Board of Directors. All other executive officers are elected by the Board of Directors or appointed by the Chief Executive Officer and all officers serve at the discretion of the Board of Directors. Each of our officers and directors, other than non-employee directors, devotes his full time to the affairs of IPG Photonics.

Our Chairman of the Board and Chief Executive Officer, Dr. Valentin P. Gapontsev, is the father of Dr. Denis Gapontsev, our Vice President of Research and Development and a director. Our Treasurer, Peter V. Mammen, is the father of our Chief Financial Officer, Timothy P.V. Mammen. There are no other family relationships among any of our directors, officers or key employees.

Composition Of The Board Of Directors Our Board of Directors is currently fixed at seven directors. Michael Child was elected to serve on our Board of Directors pursuant to an agreement entered into in August 2000 in connection with the sale of our Series B preferred stock. This agreement will terminate upon the closing of this offering. At each annual meeting of stockholders, the successors to directors whose terms are to expire will be elected to serve from the time of election and qualification until the next annual meeting following their election. Our nonemployee directors devote such time to our affairs as is necessary to discharge their duties.

Board Committee

The audit committee of our Board of Directors recommends the appointment of our independent auditors, reviews our internal accounting procedures and financial statements and consults with and reviews the services provided by our independent auditors, including the results and scope of their audit. The audit committee currently consists of Messrs. Blair and Child and Dr. Krupke.

Director Compensation Our directors are reimbursed for expenses incurred in connection with attending board and committee meetings but are not compensated for their services as board or committee members. In November 2000, we granted options to purchase 50,000 shares of common stock to Dr. Krupke and Mr. Child under our 2000 stock incentive plan at an exercise price of $7.50 per share. The options vest equally over a period of four years. For more information, see "--Stock Option Plan." In addition, Dr. Krupke also received options to purchase 50,000 shares of common stock pursuant to his membership in our National Advisory Board. These options vest equally over a four year period and have an exercise price of $1.00 per share.

Executive Compensation Summary Compensation Table The following table sets forth information regarding compensation received during the fiscal year ended December 31, 1999 by our Chief Executive Officer and each of our other executive officers whose total salary and bonus earned during the fiscal year ended December 31, 1999 exceeded $100,000:

Annual Compensation Name and Principal Position Salary Bonus Valentin P. Gapontsev Chairman of the Board of Directors and Chief Executive Officer..... $223,408 $88,023 Eugene Shcherbakov Managing Director of IPG Laser..... $124,993 -- Employment Agreements On September 1, 1995, IPG Laser entered into an employment contract with Dr. Valentin P. Gapontsev, our Chief Executive Officer and Chairman of the Board of Directors. The agreement

provides for Dr. Gapontsev's employment, for no specific term, as Managing Director of IPG Laser. Under the current terms of the agreement, Dr. Gapontsev receives annual compensation of DM 476,000, or approximately $214,000 at September 30, 2000, as well as use of a company car and company housing. In 2000, Dr. Gapontsev will receive an additional $250,000 in compensation from IPG Photonics.

Our employment agreement with Hon. John H. Dalton provides for his employment from September 1, 2000 to August 31, 2004 as our President at a base annual salary of $250,000 per year, subject to an annual increase at our discretion. The agreement provides that during his employment with us and for a period of two years after, Mr. Dalton will not enter into any business activity that is competitive with any of our business activities. Pursuant to his agreement, we granted Mr. Dalton options to purchase 300,000 shares of our common stock, at an exercise price of $2.00 per share, vesting over a four-year period. The agreement automatically renews for successive one-year periods if not terminated thirty days before the end of its current term. In the event of our termination of Mr. Dalton's employment on or after September 1, 2001 other than for cause, Mr. Dalton is entitled to the equivalent of twelve month's salary and benefits. In the event of such a termination, all of Mr. Dalton's options that are scheduled to vest on the next anniversary date following notice of termination will vest upon termination. In addition, we granted to Mr. Dalton in November 2000 options to purchase 50,000 shares of our common stock at an exercise price of $2.50 per share, vesting over a four-year period. We also entered into an agreement with Mr. Dalton as of February 3, 2000 for him to serve on our National Advisory Board. Pursuant to this agreement, he received options to purchase 50,000 shares of our common stock at a price of $1.00 per share and subsequently exercised all of those options in March 2000.

Under the current terms of our agreement with Dr. Shcherbakov, he receives an annual salary of DM 336,000, or approximately $151,080 at September 30, 2000. Either party may terminate the agreement upon three month's notice.

Our employment agreement with John Geagea provides for his employment from June 1, 2000 to June 1, 2002 as our Chief Operating Officer at a base annual salary of $200,000 per year, subject to an annual increase at our discretion. In addition, we granted Mr. Geagea options to purchase 400,000 shares of our common stock at an exercise price of $1.00 per share, vesting over a four-year period. The agreement automatically renews for successive one- year periods if not terminated thirty days before the end of its current term. In the event of our termination of Mr. Geagea's employment with less than 180 days notice, other than for cause, Mr. Geagea is entitled to the equivalent of 180 days of salary and benefits continuation.

Non-Competition Agreements In connection with the sale of our Series B preferred stock in August 2000, we entered into non-competition agreements with Drs. Valentin P. Gapontsev, Denis Gapontsev, Eugene Shcherbakov and other scientists. We intend to execute similar non-competition agreements with our scientific personnel in the future. The agreements prohibit the employees from engaging in any way with or in a business that is competitive with any member of the IPG Group for one year from termination of employment with us. The agreements also provide that the employee may not solicit

other employees from IPG Photonics, IPG Laser or IPG Fibertech within the later of 18 months after termination of employment or two years after signing and also provide for assignment of all inventions and nondisclosure of proprietary information.

Stock Option Plan

Our 2000 Incentive Compensation Plan was adopted by the Board of Directors and approved by the stockholders in April 2000. As amended in November 2000, the plan authorizes us to issue up to 7,500,000 shares of common stock. The Board of Directors currently administers the plan, but may transfer its administration to the Compensation Committee. The plan allows grants of incentive stock options to our employees, including officers and employee directors, and employees of our "affiliates" within the meaning of Section 424 of the Internal Revenue Code of 1986. In addition, the plan allows grants of nonstatutory stock options, restricted stock, stock appreciation rights, performance shares and units, and cash awards to our employees, nonemployee directors, and independent contractors, and also to employees, nonemployee directors and independent contractors of IPG Photonics or other entities deemed affiliated with IPG Photonics by the Board of Directors. The plan has a term of ten years, unless terminated sooner by the Board of Directors.

The plan provides the exercise price of incentive stock options granted under the plan must not be less than the fair market value of a share of the common stock on the date of grant, and imposes certain additional statutory requirements. In the case of nonstatutory stock options and other awards, the exercise price (or issuance price) must generally not be less than the fair market value of a share of the common stock on the date of grant, unless the Board of Directors in its sole discretion and due to special circumstances determines otherwise on the date of grant. A maximum of 2,000,000 shares of common stock may be awarded under the plan to any one individual in any calendar year. The Board of Directors has the discretion to determine vesting schedules, exercise requirements and potential forfeiture of all awards granted under the plan. The plan provides that in connection with a "change in control" (as defined in the plan), the Board of Directors may, in its sole discretion, provide that an award may be assumed by the entity taking control or may be substituted by a similar award under such entity's compensation plan. Alternatively, in connection with a change in control, the plan allows the Board of Directors to accelerate the vesting of outstanding options or other awards or to cash out outstanding options and other awards, subject to certain limitations.

As of September 30, 2000, nonstatutory stock options had been granted and restricted stock issued to employees of IPG Photonics and affiliated entities under the plan. As of September 30, 2000 under the plan, (i) 330,934 shares of common stock had been issued upon exercise of outstanding nonstatutory stock options, (ii) 250,000 shares of restricted common stock had been issued and (iii) nonstatutory stock options to purchase 2,377,766 shares of common stock, with a weighted average exercise price of $1.14, were outstanding. In November 2000, we increased the size of the plan from 3,750,000 shares to 7,500,000 shares and as of November 30, 2000 2,939,300 shares of common stock remained available for future grants.

401(k) Plan

The IPG Photonics Corporation 401(k) Retirement Plan became effective on March 1, 1999 and covers all of our eligible employees. Our 401(k) plan is intended to be a qualified retirement plan under the Internal Revenue Code. All contributions to the plan by eligible employees or by us, and the investment earnings thereon, are not taxable to such employees until withdrawn, and any contributions we may make are expected to be deductible by us when made. Our eligible employees may elect to reduce their current compensation and have the amount of such reduction contributed to our plan. We make matching contributions in an amount equal to 50% of each employee's contribution to the 401(k) plan, subject to a maximum of 6% of such employee's annual compensation.

Transactions with Related Parties

Other than the compensation agreements and other arrangements described in "Management," and the transactions described below, for the last two years there has not been, nor is there currently proposed, any transaction or series of similar transactions to which we are or will be a party:

. in which the amount involved exceeded or will exceed $60,000, and . in which any director, executive officer, holder of more than 5% of our common stock on an as-converted basis or any member of their immediate family has or will have a direct or indirect material interest.

We believe that each of the transactions described below are on terms no less favorable than could have been obtained from unaffiliated third parties. All future transactions between us and any director or executive officer will be subject to approval by a majority of the disinterested members of our board of directors.

Restructuring

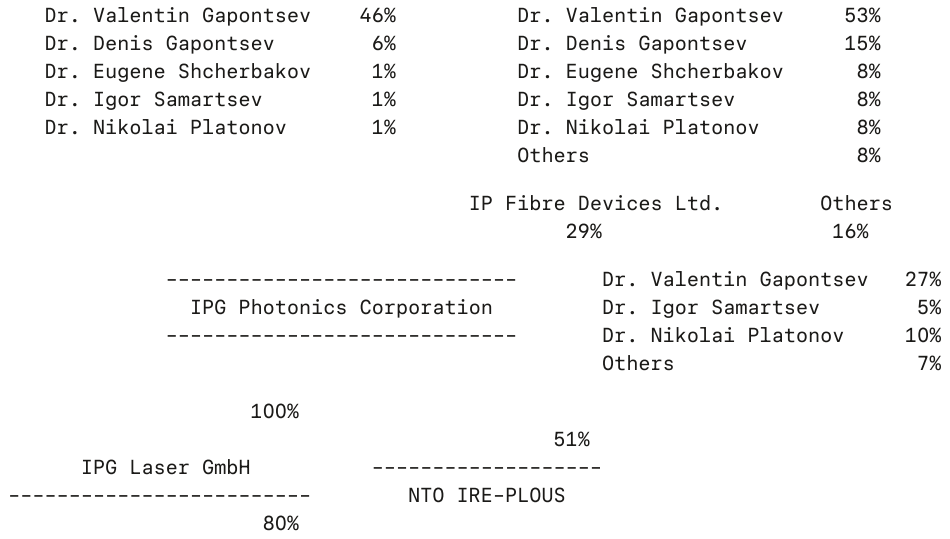
We were incorporated as a Delaware corporation in December 1998 and began operations in the United States in 1999. In November 1994, our founding shareholder, Dr. Valentin Gapontsev formed a new company in Germany, IPG Laser GmbH. Prior to August 24, 2000, Dr. Gapontsev operated several companies under his control and management. We entered into three agreements as of August 24, 2000 in connection with the restructuring of several of these entities: IPG Photonics, IPG Laser and IPG Fibertech. The restructuring was a condition precedent to an investment by the purchasers of our Series B preferred stock. The first agreement was between IPG Photonics and IP Fibre Devices, in which IP Fibre Devices sold 50% of the total issued and outstanding interests of IPG Laser to IPG Photonics in exchange for $7.5 million in cash and 1,150,000 shares of IPG Photonics common stock. The second agreement was between IPG Photonics and Dr. Valentin Gapontsev, in which Dr. Gapontsev sold 4% of the total issued and outstanding interests of IPG Laser to IPG Photonics in exchange for $2.4 million in cash. The third agreement was an option agreement in which Dr. Gapontsev granted IPG Photonics the option to purchase the remaining 46% of the total issued and outstanding interests of IPG Laser from Dr. Gapontsev in exchange for 1,403,000 shares of common stock of IPG Photonics. On October 4, 2000, IPG Photonics exercised this option and now owns 100%

of the issued and outstanding shares of IPG Laser. IPG Photonics also indirectly controls IPG Laser's 80%-held subsidiary, IPG Fibertech. The remaining 20% of IPG Fibertech is owned by Stefano Cecchi, its Managing Director.

We have agreed in principle to acquire a 51% interest in NTO IRE-POLUS, a Russian company 54.5% of which is owned by Dr. Valentin Gapontsev and his family members. For more information, see "--Transaction with NTO IRE-POLUS."

As of November 30, 2000, Dr. Valentin Gapontsev is our Chairman of the Board and Chief Executive Officer and owns 47.6% of our common stock. IP Fibre Devices owns 28.1% of our common stock and Dr. Valentin Gapontsev beneficially owns 53.0% of IP Fibre Devices' ordinary shares. Based on these shareholdings, Dr. Gapontsev owns in the aggregate 75.7% of our common stock directly through his ownership of IPG Photonics and indirectly through his control of IP Fibre Devices, excluding shares held directly by his son, Dr. Denis Gapontsev in IPG Photonics. The following chart presents the overlap in ownership of IPG Photonics, its subsidiaries and affiliated parties by common members of management without giving effect to the offering and giving effect to the closing of our proposed investment in NTO IRE-POLUS:

[Flow Chart]



IPG Fibertech S.R.L.

Dr. Valentin Gapontsev On August 13, 2000, Dr. Valentin Gapontsev borrowed DM 200,000 from IPG Laser, at an annual interest rate of 8%. This loan was repaid in full on November 30, 2000. Dr. Gapontsev has personally guaranteed $5.2 million of our outstanding obligations as of September 30, 2000.

Dr. Denis Gapontsev

On May 30, 2000, IPG Laser entered into an agreement to purchase land and a house adjacent to our Burbach facility from Dr. Denis Gapontsev, one of our directors and our Vice President of Research and Development. IPG Laser assumed the mortgages on the land having a value of DM 900,000, and paid him DM 184,000. Prior to the sale, IPG Laser had been leasing the land and house from Dr. Gapontsev since December 28, 1998 for DM 9,000 per month.

Transactions with NTO IRE-POLUS In connection with our restructuring, we entered into an agreement regarding intellectual property in August 2000 with IPG Laser, IPG Fibertech and other companies under the common ownership of Dr. Gapontsev, including NTO IRE-POLUS. Under this agreement, NTO IRE-POLUS provides research and development exclusively for us, IPG Laser and IPG Fibertech, all of whom pay NTO IRE-POLUS's direct and overhead costs plus a fee of 10% for the research and development work.

On October 3, 2000, we agreed to loan $1,000,000 to NTO IRE-POLUS. These funds will be used for working capital and capital expenditures to assist NTO IRE-POLUS in providing us components and equipment. This loan bears interest at an annual rate of 7.0% and has a term of six months from the date the money is transferred to NTO IRE-POLUS.

We have agreed in principle to invest $5.0 million in NTO IRE-POLUS for a 51% ownership interest subject to satisfaction of usual and customary closing conditions, as well as the approval of the Russian Ministry for Anti-Monopoly Policy. We anticipate that this transaction will close by January 31, 2001. The proceeds of the investment are to be used by NTO IRE-POLUS solely for equipment purchases and the development of additional manufacturing capacity.

During fiscal year 1999 and the nine-month period ended September 30, 2000, we purchased components and capital equipment from NTO IRE-POLUS in the aggregate amounts of $1,832,000 and $3,108,000, respectively. For the nine- month period ended September 30, 2000, we sold equipment to NTO IRE-POLUS in the aggregate amount of $186,794. These transactions are eliminated in the combined consolidated financial statements included elsewhere in this Prospectus. We expect this relationship to continue.

Transactions with IP Fibre Devices We sell products to IP Fibre Devices which resells those products to its customers in the United Kingdom. During 1999 and the nine month period ended September 30, 2000, we sold an aggregate of $422,200 and $76,000, respectively, to IP Fibre Devices. Effective January 1, 2001, we plan to terminate our distribution relationship with IP Fibre Devices and we intend to sell our products directly to customers in the United Kingdom through a wholly-owned subsidiary to be formed. Consequently, we plan to sublease office space from, and share general and administrative expenses of, IP Fibre Devices at an aggregate estimated annual amount of approximately $250,000.

During 1999 and the nine month period ended September 30, 2000, we paid $88,000 and $67,500, respectively to IP Fibre Devices for general management and consulting services. Under a management agreement with IP Fibre Devices, we have agreed to pay IP Fibre Devices a monthly fee of $7,500 plus expenses for management services until December 31, 2000.

TeraBeam Agreements

We sell a significant amount of our products to TeraBeam. In April 1998, IP Fibre Devices entered into an agreement with TeraBeam granting TeraBeam 36 months worldwide exclusivity for the purchase and use of free-space optical point-to-multipoint fiber amplifiers with one or more Watt output power. Under this agreement, TeraBeam is entitled to receive certain agreed upon amounts from IP Fibre Devices in the event of a breach of exclusivity. From July 1998 to August 1998, IPG Laser sold $185,370 worth of products to TeraBeam in exchange for $135,370 in cash and 571,428 shares of TeraBeam common stock. Pursuant to a partnering agreement executed with TeraBeam in April 1998, TeraBeam issued in August 1998 1,561,144 shares of its common stock to IP Fibre Devices in consideration of a discount on products sold to TeraBeam. From November 1999 to February 2000, we sold an aggregate of $2.0 million of our products to TeraBeam. TeraBeam paid IPG Photonics $1.6 million in cash and issued 865,924 common shares of TeraBeam to IP Fibre Devices. In connection with this transaction, IP Fibre Devices issued a note to IPG Photonics in the amount of $396,656. This note was repaid with accrued interest in October 2000. In connection with the 1998 agreement with TeraBeam, TeraBeam granted Dr. Valentin Gapontsev options to purchase 100,000 shares of common stock of TeraBeam for his services on the Technical Advisory Board of TeraBeam. All of such options have been exercised. In February 2000, Peter V. Mammen, our treasurer, purchased 120,000 shares of TeraBeam at an aggregate purchase price of $60,000.

Robert A. Blair

As of October 4, 1999, we entered into an agreement with Robert A. Blair, our Vice Chairman of the Board of Directors, for legal services and non-legal consulting services in connection with strategic business advice and other matters. Pursuant to this agreement, Mr. Blair received options to purchase 200,000 shares of our common stock at an exercise price of $1.00 per share and the right to purchase, as of March 2000, 250,000 shares of our common stock at a price of $1.00 per share. We also entered into an agreement with Mr. Blair as of February 3, 2000 for him to serve as Chairman of our National Advisory Board. Pursuant to this agreement, he received options to purchase 50,000 shares of our common stock at a price of $1.00 per share. In March 2000, he transferred options to purchase 10,000 shares to family members, exercised the remainder of his 240,000 options. He subsequently also acquired the 250,000 shares of our common stock at a purchase price of $1.00 per share. He purchased these shares by payment of $50,000 cash and promissory notes with face amounts totaling $440,000. The first note bears interest at an annual rate of 6.8% and the second note bears interest at 6.01%. These notes are payable in March 2005 and November 2005, respectively.

Intercompany Loans

In January 1999, IP Fibre Devices issued the Company a note in the principal amount of $175,000 which accrued interest at 5% per annum. In November 1999, IP Fibre Devices and the Company entered into an agreement in which IP Fibre Devices agreed to pay an additional $18,000 to the Company and convert the note and accrued interest of $182,000 into 10,000,000 shares of our common stock, the total consideration paid by IP Fibre Devices was $200,000. The common stock was issued to IP Fibre Devices in January 2000.

In November 1997, IP Fibre Devices issued IPG Laser a note in the principal amount of DM 156,000 which accrued interest at 5% per annum. The note and accrued interest was repaid in full to IP Fibre Devices in March 2000.

Indemnification

We have entered into indemnification agreements with each of our directors. Such indemnification agreements require us to indemnify our directors to the fullest extent permitted by Delaware law. For a description of the limitation of our directors' liability and our indemnification of officers, see "Indemnification of Directors and Executive Officers and Limitation of Liability."

Employment Agreements We have entered into employment arrangements, compensation arrangements and severance arrangements with certain of our executive officers. For more information regarding these arrangements, see "Management--Employment Agreements" and "--Executive Compensation." For information regarding stock options, see "Management--Stock Option Plan."

Indemnification of Directors and Executive Officers and Limitation of Liability

As permitted by the Delaware General Corporation Law, we have adopted provisions in our certificate of incorporation which provide that our directors shall not be personally liable for monetary damages to IPG Photonics or its stockholders for a breach of fiduciary duty as a director, except liability for:

. a breach of the director's duty of loyalty to us or our stockholders;

. acts or omissions not in good faith or which involve intentional misconduct or a known violation of law;

. an act related to our unlawful stock repurchase or payment of a dividend under Section 174 of the Delaware General Corporation Law; or . transactions from which the director derived an improper personal benefit.

These limitations of liability do not apply to liabilities arising under the federal securities laws and do not affect the availability of equitable remedies such as injunctive relief or rescission. Our certificate of incorporation also authorizes us to indemnify our officers, directors and other agents to the fullest extent permitted under the Delaware General Corporation Law.

As permitted by the Delaware General Corporation Law, our bylaws provide that:

. we are required to indemnify our directors and officers to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions;

. we are required to advance expenses, as incurred, to our directors and officers in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions; and . the rights provided in the bylaws are not exclusive.

We have entered into separate indemnification agreements with each of our directors which are broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements require us, among other things, to indemnify our directors against liabilities that may arise by reason of their status or service as directors, other than liabilities arising from willful misconduct. These indemnification agreements also require us to advance any expenses incurred by the directors as a result of any proceeding against them as to which they could be indemnified and to obtain directors' and officers' insurance.

At present, there is no pending litigation or proceeding involving any of our directors, officers, employees or agents where indemnification by us is sought. In addition, we are not aware of any threatened litigation or proceeding which may result in a claim for indemnification.

We intend to maintain directors' and officers' liability insurance if available on reasonable terms.

Principal Stockholders

The following table sets forth information known to us regarding the beneficial ownership of our common stock as of November 30, 2000, and as adjusted to reflect the sale of the common stock offered hereby, by:

. each stockholder who is known by us to beneficially own more than 5% of common stock;

. our Chairman and our four other most highly compensated executive officers;

. each of our directors; and . all of our executive officers and directors as a group.

Stockholder	Beneficial Ownership Prior to Offering(1)	Percent Owned Prior to Offering	Percent Owned After Offering
Dr. Valentin P. Gapontsev (2).....	30,053,000	76%	
Hon. John H. Dalton.....	135,000	*	
Dr. Eugene Shcherbakov (3).....	300,000	*	
Timothy P. V. Mammen (4).....	62,500	*	
John Geagea.....	0	*	
Dr. Denis Gapontsev (5).....	2,500,000	6	
Dr. William F. Krupke (6).....	12,500	*	
Robert A. Blair.....	490,000	1	
Michael C. Child (7).....	3,704	*	
IP Fibre Devices Ltd.....	11,150,000	28	
Entities affiliated with TA Associates, Inc (8).....	2,000,000	5	
All directors and executive officers as a group (9 persons).....	35,494,204	89	

* represents less than 1% (1) The number of shares beneficially owned and the percentage of share outstanding are based on (a) 39,683,934 shares outstanding as of November 30, 2000 and assuming the conversion of 4,300,000 shares of our Series A and Series B preferred stock (b) shares outstanding after completion of this offering, assuming no exercise of the underwriters' over-allotment option. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. All shares of common stock subject to options

exercisable within 60 days following September 30, 2000 are deemed to be outstanding and beneficially owned by the person holding those options for the purpose of computing the number of shares beneficially owned and the percentage of ownership of that person. They are not, however, deemed to be outstanding and beneficially owned for the purpose of computing the percentage ownership of any other person. Except as indicated in the other footnotes to the table and subject to applicable community property laws, based on information provided by the persons named in the table, these persons have sole voting and investment power with respect to all shares of the common stock shown as beneficially owned by them. Unless otherwise noted below, the address of each of the individuals named above is c/o IPG Photonics Corporation, P.O. Box 519, 660 Main Street, Sturbridge, MA 01566. (2) Excludes shares beneficially owned by Dr. Denis Gapontsev, for which Dr. Valentin Gapontsev disclaims beneficial ownership. Includes all shares beneficially owned by IP Fibre Devices, of which Dr. Valentin Gapontsev owns 53% of its ordinary shares. (3) Excludes shares beneficially owned by IP Fibre Devices of which Dr. Shcherbakov owns 8% of its ordinary shares, for which he disclaims beneficial ownership. (4) Includes 62,500 shares of common stock issuable upon exercise of options that are exercisable within sixty days of September 30, 2000. Excludes shares beneficially owned by Peter Mammen, for which Timothy Mammen disclaims beneficial ownership.

(5) Excludes shares beneficially owned by Dr. Valentin Gapontsev, for which Dr. Denis Gapontsev disclaims beneficial ownership. Excludes shares beneficially owned by IP Fibre Devices of which Dr. Denis Gapontsev owns 15% of its ordinary shares, for which he disclaims beneficial ownership. (6) Includes 12,500 shares of common stock beneficially owned by Dr. Krupke under a stock option granted to him for service as a member of our National Advisory Board. (7) Mr. Child disclaims beneficial ownership of all shares held by affiliates of TA Associates, Inc. of which Mr. Child is a Managing Director, except to the extent of 3,704 shares of common stock in which he has an ownership interest through TA Investors LLC. (8) Includes 1,028,000 shares held by TA IX, L.P., 480,000 shares held by TA/Advent VIII L.P., 444,480 shares held by TA/Atlantic and Pacific IV L.P., 17,360 shares held by TA Executives Fund LLC and 30,160 shares held by TA Investors LLC. TA IX, L.P., TA/Advent VIII L.P., TA/Atlantic and Pacific IV L.P., TA Executives Fund LLC and TA Investors LLC are part of an affiliated group of investment partnerships. The general partner of TA/Advent VIII L.P. is TA Associates VIII LLC. In such capacity, TA Associates, Inc., through an executive committee, exercises sole voting and investment power with respect to all shares held of record by the named investment partnerships; individually, no stockholder, director or officer of TA Associates, Inc., is deemed to have or share such voting or investment power. The address of TA Associates, Inc. is 125 High Street, High Street Tower, Suite 2500, Boston, MA 02110.

Description of Capital Stock

Presently we are authorized to issue 50,000,000 shares of common stock and 5,000,000 shares of preferred stock. Upon the completion of this offering, we will be authorized to issue 505,000,000 shares, $0.0001 par value per share comprised of 500,000,000 shares of common stock and 5,000,000 shares of preferred stock.

The following description of the material terms of our capital stock is only a summary. You should refer to our certificate of incorporation and bylaws as in effect upon the closing of this offering, which are included as exhibits to the registration statement of which this prospectus forms a part, and by the provisions of applicable Delaware law.

Common Stock

As of November 30, 2000, and assuming the conversion of all outstanding shares of preferred stock into common stock, there were 39,683,934 shares of common stock outstanding which were held of record by approximately 80 stockholders. There will be shares of common stock outstanding (assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options after September 30, 2000) after giving effect to the sale of our common stock in this offering. We currently have reserved 7,500,000 shares of stock under our 2000 stock incentive plan of which there were 2,377,766 shares of common stock issuable upon exercise of options as of September 30, 2000. There were also 100,000 shares of common stock issuable upon exercise of non-plan options. See "Management--Stock Option Plan" for a description of our stock plan.

The holders of our common stock are entitled to one vote per share held of record on matters submitted to a vote of the stockholders. Our amended and restated certificate of incorporation does not provide for cumulative voting in the election of directors. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for that purpose. In the event of our liquidation, holders of our common stock are entitled to share ratably in our remaining net assets, subject to payment or provision for payment of our debts and other liabilities and prior distribution rights of preferred stock, if any, then outstanding. Holders of our common stock have no preemptive or other subscription or conversion rights. There are no redemption or sinking fund provisions applicable to our common stock. All outstanding shares of common stock are fully paid and non-assessable and the shares of common stock to be issued upon the completion of this offering will be fully paid and non-assessable.

Preferred Stock

Upon the closing of this offering, all shares of our Series B preferred stock will convert into common stock on a one-to-one basis if the proceeds of this offering meet or exceed $100.0 million and the initial public offering price is at least $40.00 per share, if the offering closes on or prior to December 31, 2000, or $43.75 per share, if the offering closes between January 1, 2001 to March 31, 2001. All shares of our Series A preferred stock outstanding will be converted into an aggregate of 500,000 shares of common stock. Our board of directors has the authority, without action by the stockholders, to provide for the designation and issuance of preferred stock in one or more series, to establish the number of shares to be included in each such series and to fix the designations, powers, preferences and rights of the shares of each such series and any qualifications, limitations or restrictions of each such series. The rights, preferences and privileges of each series of preferred stock may be greater than the rights of our common stock. It is not possible to state the actual effect of the issuance of any shares

of preferred stock upon the rights of holders of our common stock until the board of directors determines the specific rights of the holders of any preferred stock that may be issued. However, the effects might include, among other things:

. restricting dividends on the common stock;

. diluting the voting power of the common stock;

. impairing the liquidation rights of the common stock; and . delaying or preventing a change in our control without further action by the stockholders.

We have no present plans to issue any additional shares of preferred stock.

Warrants

There are outstanding warrants to purchase an aggregate of shares of common stock assuming an offering price of $. These warrants were granted in August, October and December 2000 to a group of private investors in connection with the sale of our Series B preferred stock. These warrants entitle the holders to purchase an aggregate of $23.8 million worth of our common stock. The exercise price will equal 50% of the public offering price. They are exercisable upon the sale of all of our assets or stock or an underwritten initial public offering of our common stock. The warrants expire on August 30, 2007, unless earlier exercised.

Registration Rights

Under our two agreements regarding registration rights with holders of shares of our convertible preferred stock (4,300,000 shares assuming conversion of all outstanding shares of Series A and Series B preferred stock), the holders of these shares are entitled to certain registration rights regarding these shares. The registration rights provide that if we propose to register any securities under the Securities Act of 1933, either for our own account or for the account of other security holders exercising registration rights, such holders are entitled to notice of the registration and are entitled to include shares of their common stock in the registration. This right is subject to conditions and limitations, including the right of the underwriters in an offering to limit the number of shares included in the registration. The holders of Series A preferred stock may require us to file one, and holders of Series B preferred stock may require us to file up to two, registration statements under the Securities Act at our expense with respect to their shares. We are required to use our commercially reasonable best efforts to effect the registrations, subject to conditions and limitations. Furthermore, the holders of shares of our Series B preferred stock that will convert into common stock upon completion of the offering may require us to file additional registration statements on Form S-3, subject to conditions and limitations.

Delaware Anti-Takeover Law And Certain Charter And Bylaw Provisions Certain provisions of Delaware law and our amended and restated certificate of incorporation and bylaws could make more difficult the acquisition of our company by means of a tender offer, a proxy contest or otherwise and the removal of incumbent officers and directors. These provisions, summarized below, may discourage certain types of coercive takeover practices and inadequate takeover bids and encourage persons seeking to acquire control of our company to first negotiate with our company. We believe that the

benefits of increased protection of our company's potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company outweigh the disadvantages of discouraging such proposals because, among other things, negotiation of such proposals could result in an improvement of their terms.

We will be subject to Section 203 of the Delaware General Corporation Law regulating corporate takeovers which prohibits a Delaware corporation from engaging in any business combination with an "interested stockholder," unless:

. prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

. the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers, and (b) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or . on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Except as otherwise specified in Section 203, an "interested stockholder" is defined to include (a) any person that is the owner of 15% or more of the outstanding voting securities of the corporation, or is an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation at any time within three years immediately prior to the date of determination and (b) the affiliates and associates of any such person.

Our certificate of incorporation and bylaws do not provide for cumulative voting in the election of directors. The authorization of undesignated preferred stock makes it possible for the board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of our company. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our company.

Transfer Agent And Registrar The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company.

Shares Eligible for Future Sale

Prior to this offering, there has not been a public market for our common stock. Future sales of substantial amounts of our common stock in the public market, or the possibility of these sales could adversely affect the trading price of the common stock.

Upon completion of this offering, we will have outstanding shares of common stock, assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options to purchase common stock after September 30, 2000. Of these shares, the shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares purchased by our "affiliates," as defined in Rule 144 under the Securities Act, which would be subject to the limitations and restrictions described below.

The remaining shares of common stock outstanding upon completion of this offering will be "restricted securities" as defined in Rule 144. These securities may be sold in the public market only if registered or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below. Sales of these restricted securities in the public market, or the availability of these shares for sale, could adversely affect the trading price of our common stock.

Holders of approximately of these restricted securities, including all of our officers and directors and the entities affiliated with them and all of our significant stockholders, have entered into lock-up agreements providing that, subject to limited exceptions, they will not sell, directly or indirectly, any common stock without the prior consent of Merrill Lynch, Pierce, Fenner & Smith Incorporated for a period of 180 days from the date of this prospectus.

All of these restricted securities will be eligible for sale in the public market, subject in some cases to the volume limitations and other restrictions of Rule 144, beginning 180 days after the date of this prospectus upon expiration of the lock-up agreements described above.

Shares issued upon exercise of options granted by us prior to the date of this prospectus will be available for sale in the public market under Rule 701 of the Securities Act. Rule 701 permits resales of these shares in reliance upon Rule 144 but without compliance with various restrictions, including the holding period requirement, imposed under Rule 144. In general, under Rule 144, beginning 90 days after the date of this prospectus, a person (or persons whose shares are aggregated) who has beneficially owned restricted securities for at least one year would be entitled to sell within any three-month period a number of shares not to exceed the greater of (1) one percent of the then outstanding shares of common stock or (2) the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a Form 144 with respect to the sale. Sales under Rule 144 are also subject to manner of sale and notice requirements, as well as to the availability of current public information about us. Under Rule 144(k), a person who is not deemed to have been an affiliate at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least two years is entitled to sell the shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144.

Upon consummation of this offering, we will have reserved an aggregate of 7,500,000 shares of common stock for issuance pursuant to our 2000 stock incentive plan. As of September 30, 2000, options to purchase an aggregate of 2,377,766 shares of common stock were outstanding under our stock option plan. We intend to file registration statements on Form S-8 under the Securities Act approximately 90 days after the date of this prospectus to register all of such reserved shares of common stock issued or reserved for issuance under our stock option plan. Such common stock issued

under the foregoing plans, after the filing of related registration statements, will be freely tradable in the public market, subject in the case of the holders to the Rule 144 limitations applicable to our affiliates, lock-up agreements with the underwriters and vesting restrictions imposed by us.

Underwriting

General

We intend to offer the shares in the U.S. and Canada through the U.S. underwriters and elsewhere through the international managers. Merrill Lynch, Pierce, Fenner & Smith Incorporated, Robertson Stephens, Inc., CIBC World Markets Corp., U.S. Bancorp Piper Jaffray Inc. and Wit SoundView Corporation are acting as U.S. representatives of the U.S. underwriters named below. Subject to the terms and conditions described in a U.S. purchase agreement among us and the U.S. underwriters, and concurrently with the sale of shares to the international managers, we have agreed to sell to the U.S. underwriters, and the U.S. underwriters severally have agreed to purchase from us, the number of shares listed opposite their names below.

Number of U.S. Underwriters Shares Merrill Lynch, Pierce, Fenner & Smith Incorporated..... Robertson Stephens, Inc. ..... CIBC World Markets Corp..... U.S. Bancorp Piper Jaffray Inc..... Wit SoundView Corporation..... Total.....

We have also entered into an international purchase agreement with the international managers for sale of the shares outside the U.S. and Canada for whom Merrill Lynch International, Robertson Stephens, Inc., CIBC World Markets Corp., U.S. Bancorp Piper Jaffray Inc. and Wit SoundView Corporation are acting as lead managers. Subject to the terms and conditions in the international purchase agreement, and concurrently with the sale of shares to the U.S. underwriters pursuant to the U.S. purchase agreement, we have agreed to sell shares to the international managers, and the international managers severally have agreed to purchase shares from us. The initial public offering price per share and the total underwriting discount per share are identical under the U.S. purchase agreement and the international purchase agreement.

The U.S. underwriters and the international managers have agreed to purchase all of the shares sold under the U.S. and international purchase agreements if any of these shares are purchased. If an underwriter defaults on its obligations under the U.S. or international purchase agreement, the U.S. and international purchase agreements provide that the purchase commitments of the nondefaulting underwriters may be increased or the purchase agreements may be terminated. The closings for the sale of shares to be purchased by the U.S. underwriters and the international managers are conditioned on one another. We have agreed to indemnify the U.S. underwriters and international managers against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the U.S. underwriters and international managers may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the purchase agreements, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts The U.S. representatives have advised us that the U.S. underwriters propose initially to offer the shares to the public at the initial public offering price on the cover page of this prospectus and to dealers at that price

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less a concession not in excess of $    per share. The U.S. underwriters may
allow, and dealers may reallow, a discount not in excess of $    per share to
other dealers. After the initial public offering, the public offering price,
concession and discount may be changed.
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The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the U.S. underwriters and international managers of their over-allotment options.

Per Share Without Option With Option

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Public offering price.............    $           $            $
Underwriting discount.............    $           $            $
Proceeds, before expenses, to IPG
 Photonics........................    $           $            $
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The expenses of the offering, not including the underwriting discount, are estimated at $1,000,000 and are payable by us.

Over-Allotment Options We have granted options to the U.S. underwriters to purchase up to additional shares at the public offering price less the underwriting discount. The U.S. underwriters may exercise these options for 30 days from the date of this prospectus solely to cover any over-allotments. If the U.S. underwriters exercise these options, each will be obligated, subject to conditions contained in the purchase agreements, to purchase a number of additional shares proportionate to that U.S. underwriter's initial amount reflected in the above table.

We have also granted options to the international managers, exercisable for 30 days from the date of this prospectus, to purchase up to additional shares to cover any over-allotments on terms similar to those granted to the U.S. underwriters.

Intersyndicate Agreement The U.S. underwriters and the international managers have entered into an intersyndicate agreement that provides for the coordination of their activities. Under the intersyndicate agreement, the U.S. underwriters and the international managers may sell shares to each other for purposes of resale at the initial public offering price, less an amount not greater than the selling concession. Under the intersyndicate agreement, the U.S. underwriters and any dealer to whom they sell shares will not offer to sell or sell shares to persons who are non-U.S. or non-Canadian persons or to persons they believe intend to resell to persons who are non-U.S. or non-Canadian persons, except in the case of transactions under the intersyndicate agreement. Similarly, the international managers

and any dealer to whom they sell shares will not offer to sell or sell shares to U.S. persons or Canadian persons or to persons they believe intend to resell to U.S. or Canadian persons, except in the case of transactions under the intersyndicate agreement.

Reserved Shares

At our request, the underwriters have reserved for sale, at the initial public offering price, up to % of the shares offered by this prospectus for sale to some of our employees and business associates. If these persons purchase reserved shares, this will reduce the number of shares available for sale to the general public. Any reserved shares that are not orally confirmed for purchase within one day of the pricing of this offering will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus.

No Sales of Similar Securities We and our executive officers and directors and all of our significant stockholders have agreed, with exceptions, not to sell or transfer any common stock for 180 days after the date of this prospectus without first obtaining the written consent of Merrill Lynch. Specifically, we and these other individuals have agreed not to directly or indirectly:

. offer, pledge, sell or contract to sell any common stock;

. sell any option or contract to purchase any common stock;

. purchase any option or contract to sell any common stock;

. grant any option, right or warrant for the sale of any common stock;

. lend or otherwise dispose of or transfer any common stock;

. request or demand that we file a registration statement related to the common stock; or . enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock, whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lockup provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Quotation on the Nasdaq National Market We expect the shares to be approved for quotation on the Nasdaq National Market, subject to notice of issuance, under the symbol "IPGP."

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the U.S. representatives and lead managers. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are:

. the valuation multiples of publicly traded companies that the U.S. representatives and the lead managers believe to be comparable to us;

. our financial information;

. the history of, and the prospects for, our company and the industry in which we compete;

. an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues;

. the present state of our development; and . the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares being offered in this offering to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids Until the distribution of the shares is completed, SEC rules may limit the underwriters and selling group members from bidding for or purchasing our common stock. However, the U.S. representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may make short sales of the common stock. Short sales involve the sale by the underwriters at the time of the offering of a greater number of shares than they are required to purchase in the offering. Covered short sales are sales made in an amount not greater than the over-allotment options. The U.S. representatives may close out any covered short position by either exercising the over-allotment options or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the U.S. representatives will consider, among other things, the price of shares available for purchase in the open market as compared to the public offering price at which they may purchase the shares through the over-allotment option. Naked short sales are sales in excess of the over-allotment option. The U.S. representatives must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the U.S. representatives are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering. Similar to other purchase transactions, the purchases by the U.S. representatives to cover syndicate short positions may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of the common stock may be higher than it would otherwise be in the absence of these transactions.

The U.S. representatives may also impose a penalty bid on underwriters and selling group members. This means that if the U.S. representatives purchase shares in the open market to reduce the underwriters' short position or to stabilize the price of such shares, they may reclaim the amount of the selling concession from the underwriters and selling group members who sold those shares. The imposition of a penalty bid may also affect the price of the shares in that it discourages resales of those shares.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor any of the underwriters make any representation that the U.S. representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution Neither we nor the U.S. underwriters will rely on third party providers to comply with the prospectus delivery requirements. All purchasers will receive a printed version of the final prospectus.

Merrill Lynch will be facilitating Internet distribution for this offering to certain of its Internet subscription clients. Merrill Lynch intends to allocate a limited number of shares for sale to its online brokerage clients. An electronic prospectus is available on the web site maintained by Merrill Lynch. Other than the prospectus in electronic format, the information on the Merrill Lynch web site relating to this offering is not a part of this prospectus.

A prospectus in electronic format is being made available on an Internet web site maintained by Wit SoundView Corporation's strategic partner, E*Trade Securities, Inc. Other than the prospectus in electronic format, the information on any U.S. underwriter's web site and any information contained in any other web site maintained by an U.S. underwriter is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any U.S. underwriter in its capacity as underwriter and should not be relied upon by investors.

Other Relationships

Merrill Lynch KECALP L.P. 1999, KECALP Inc., KECALP Inc., as Nominee for Merrill Lynch KECALP International L.P. 1999 and ML IBK Positions, Inc., entities which are affiliated with Merrill Lynch, Pierce, Fenner & Smith Incorporated, one of the underwriters, beneficially own an aggregate of 600,000 shares of Series B preferred stock.

Bayview 2000, L.P., an entity which is affiliated with Robertson Stephens, one of the underwriters, beneficially owns an aggregate of 80,000 shares of Series B preferred stock.

Legal Matters

Selected legal matters in connection with the offering of common stock are being passed upon for us by Winston & Strawn, New York, New York. As of the date of this prospectus, a partner of Winston & Strawn owned 2,000 shares of Series A preferred stock. Selected legal matters in connection with the offering are being passed upon for the underwriters by Brown & Wood llp, New York, New York.

Experts

The combined consolidated financial statements of IPG Photonics and related companies as of and for the year ended December 31, 1999, included in this prospectus have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report appearing herein, and have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The combined consolidated financial statements of IPG Laser and NTO IRE- POLUS as of December 31, 1998 and for each of the two years in the period ended December 31, 1998, included in this prospectus have been audited by Deloitte & Touche GmbH, independent auditors, as stated in their report appearing herein, and have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

Where You Can Find More Information

We have filed with the SEC a registration statement on Form S-1 under the Securities Act, with respect to the shares to be sold in this offering. This prospectus does not contain all of the information set forth in the registration statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC. For further information about us and the shares to be sold in this offering, please refer to the registration statement. Statements contained in this prospectus as to the contents of any contract, agreement or other document referred to, are not necessarily complete, and in each instance please refer to the copy of the contract, agreement or other document filed as an exhibit to the registration statement, each statement being qualified in all respects by this reference.

You may read and copy all or any portion of the registration statement or any reports, statements or other information we file with the SEC at the public reference facilities maintained by the SEC at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, DC 20549, and at the Regional Offices of the SEC located at Suite 1400, Northwestern Atrium Center, 500 West Madison Street, Chicago, Illinois 60661-2551 and Room 1400, 13th Floor, 7 World Trade Center, New York, New York 10048. Copies of such material are also available by mail from the Public Reference Branch of the SEC at 450 Fifth Street, N.W., Washington, DC 20549 at prescribed rates.

Please call the SEC at 1-800-SEC-0330 for more information on the public reference rooms. You can also find our SEC filings at the SEC's website at http://www.sec.gov.

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Report of Independent Auditors

The accompanying combined consolidated financial statements give effect to the completion of the Company's investment in NTO IRE-POLUS described in Note 1 which will take place prior to the effective date of the offering. The following report is in the form which will be furnished by Deloitte & Touche LLP upon the completion of the investment in NTO IRE-POLUS and assuming that no other material events have occurred that would affect the accompanying combined consolidated financial statements or require disclosure therein.

"Report of Independent Auditors To the Shareholders of IPG Photonics Corporation:

We have audited the accompanying combined consolidated balance sheet of IPG Photonics Corporation and related companies as of December 31, 1999, and the related combined consolidated statements of operations, shareholders' equity and cash flows for the year then ended. The combined consolidated financial statements include the accounts of IPG Photonics Corporation and three related companies, NTO IRE-POLUS, IPG Laser GmbH and IPG Fibertech S.r.l. These companies are under common ownership and common management. These financial statements are the responsibility of the companies' management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the combined consolidated financial position of IPG Photonics Corporation and related companies as of December 31, 1999, and the results of their combined consolidated operations and their combined consolidated cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Boston, Massachusetts December 6, 2000 (January 2001 as to Note 1)" Deloitte & Touche LLP Boston, Massachusetts December 8, 2000

Report of Independent Auditors

The accompanying combined consolidated financial statements give effect to the completion of the Company's investment in NTO IRE-POLUS described in Note 1 which will take place prior to the effective date of the offering. The following report is in the form which will be furnished by Deloitte & Touche GmbH upon the completion of the investment in NTO IRE-POLUS and assuming that no other material events have occurred that would affect the accompanying combined consolidated financial statements or require disclosure therein.

"Report of Independent Auditors To the Shareholders of IPG Laser GmbH and NTO IRE-POLUS:

We have audited the accompanying combined consolidated balance sheet of IPG Laser GmbH and subsidiary (a German corporation) and NTO IRE-POLUS (a Russian limited liability company), both of which are under common ownership and common management, as of December 31, 1998, and the related combined consolidated statements of operations, shareholders' equity and cash flows for each of the two years in the period ended December 31, 1998. These financial statements are the responsibility of the companies' management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. 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. An audit also includes 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, the financial statements referred to above present fairly, in all material respects, the combined consolidated financial position of IPG Laser GmbH and NTO IRE-POLUS as of December 31, 1998, and the results of their combined consolidated operations and their combined consolidated cash flows for each of the two years in the period ended December 31, 1998, in conformity with accounting principles generally accepted in the United States of America.

Duesseldorf, Germany December 6, 2000 (January , 2001 as to Note 1)" Deloitte & Touche GmbH Duesseldorf, Germany December 8, 2000 COMBINED CONSOLIDATED BALANCE SHEETS (In thousands, except share data)

September 30, 2000		December 31,	December 31,
		1998	1999
Actual	Pro forma		

			Predecessor	
(unaudited)				
Assets:				
Current assets:				
Cash and cash equivalents	$1,311	$ 740	$ 65,814	
Accounts receivable, net of allowances of $32, $5 and $335	1,816	1,785	11,761	
Due from affiliates	415	221	560	
Inventories	514	2,364	7,417	
Deferred tax assets	--	86	163	
Prepaid expenses and other assets	355	335	1,212	
Total current assets	4,411	5,531	86,927	
Non-marketable investment securities	50	43	38	
Deferred tax assets	52	--	738	
Property, plant and equipment, net	4,606	7,333	15,547	
Other assets	16	236	196	
Total assets	$9,135	$13,143	$103,446	
Liabilities and shareholders' equity:				
Current liabilities:				
Current portion of long-term debt	$ 21	$ 225	$ 1,982	
Accounts payable	2,210	3,266	4,210	
Due to affiliates	735	354	--	
Accrued expenses and other liabilities	360	475	2,443	
Income taxes payable	145	1,788	6,513	
Deferred tax liabilities	45	--	--	
Total current liabilities	3,516	6,108	15,148	
Long-term debt	4,695	4,421	5,317	
Deferred income taxes	--	50	--	
Commitments and contingencies (See Note 8)	--	--	--	
Minority interests	248	179	421	
Convertible redeemable preferred stock--Series B, $0.0001 par value; 3,800,000 shares authorized, 3,000,000 shares issued and outstanding at September 30, 2000 actual; no shares issued or outstanding at September 30, 2000 pro forma	--	--	62,389	$ --
Shareholders' equity:				
Preferred stock--$0.0001 par value; 700,000 shares authorized, no shares issued or outstanding	--	--	--	--
Convertible preferred stock--Series A, $0.0001 par value; 500,000 shares authorized, 500,000 shares issued and outstanding at September 30, 2000 actual; no shares issued or outstanding on a pro forma basis at September 30,				

2000	--	--	4,954	--	
Common stock, $.0001par value, 50,000,000 shares authorized, 21,800,000 issued and outstanding at December 31, 1999; 33,980,934 shares issued and outstanding at September 30, 2000 actual; 50,000,000 shares authorized, 37,480,934 shares issued and outstanding at September 30, 2000 pro forma	--	2	3	4	
Additional paid-in capital	309	309	23,412	90,754	
Warrants to issue common stock	--	--	12,400	12,400	
Notes receivable from shareholders	--	--	(440)	(440)	
Deferred compensation	--	--	(13,242)	(13,242)	
Retained earnings (accumulated deficit)	379	2,257	(6,227)	(6,227)	
Accumulated other comprehensive (loss)	(12)	(183)	(689)	(689)	
Total shareholders' equity	676	2,385	20,171	$ 82,560	
Total liabilities and shareholders' equity	$9,135	$13,143	$103,446		

See notes to combined consolidated financial statements.

COMBINED CONSOLIDATED STATEMENTS OF OPERATIONS (In thousands, except share and per share data)

	For the year ended December 31,			For the nine months ended September 30,	
	1997	1998	1999	1999	2000
	Predecessor			(unaudited)	
Net sales	$3,124	$8,289	$18,637	$14,831	$32,512
Cost of sales(1)	2,065	5,327	9,307	6,795	11,055
Gross profit(1)	1,059	2,962	9,330	8,036	21,457
Operating expenses:					
Sales and marketing(2)	219	374	677	619	1,049
Research and development(3)	312	840	1,695	1,190	1,610
General, administrative and other(4)	322	1,040	2,766	2,046	4,066
Equity-based compensation	--	--	--	--	8,719
Total operating expenses	853	2,254	5,138	3,855	15,444
Operating income	206	708	4,192	4,181	6,013
Interest income (expense), net	(118)	(208)	(303)	(231)	(77)
Other income (expense), net	(14)	38	126	(42)	401
Income before provision for income taxes and minority interests	74	538	4,015	3,908	6,337
Provision for income taxes	31	234	2,206	2,232	4,639
Minority interests in (income) loss of less than 100% owned companies	(19)	(77)	69	113	(242)
Net income	24	227	1,878	1,789	1,456
Accretion of preferred stock	--	--	--	--	(169)
Net income available to common shareholders	$ 24	$ 227	$ 1,878	$ 1,789	$ 1,287
Net income per share:					
Basic	--	--	$ 0.05	$ 0.05	$ 0.04
Diluted	--	--	$ 0.05	$ 0.05	$ 0.04
Pro forma net income per share:					

Basic	--	--	--	-- $ 0.04
Diluted	--	--	--	-- $ 0.04

(1) Excludes $677 of equity-based compensation for the nine months ended September 30, 2000. (2) Excludes $166 of equity-based compensation for the nine months ended September 30, 2000. (3) Excludes $184 of equity-based compensation for the nine months ended September 30, 2000. (4) Excludes $7,692 of equity-based compensation for the nine months ended September 30, 2000.

See notes to Combined Consolidated Financial Statements.

COMBINED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (In thousands, except share and per share data)

	Convertible Preferred Stock Series A		Common Stock			Warrants	Notes		
	Number of Shares	Value	Number of Shares	Par Value	Paid-in Capital	to Issue Common Stock	Receivable from Shareholders	Deferred Compensation	Accumulated Comprehensive Deficit
Balance at January 1, 1997 (Predecessor)	--	$ --	--	$--	$ 180	$ --	$ --	$ --	$ 128
$ (13) Contributions from shareholders	--	--	--	--	129	--	--	--	--
-- Comprehensive income: Net income	--	--	--	--	--	--	--	--	--
24 -- Translation adjustments	--	--	--	--	--	--	--	--	--
(24) Total comprehensive income	--	--	--	--	--	--	--	--	--
-- -- -- -- Balance at December 31, 1997 (Predecessor)	--	--	--	--	309	--	--	--	152
(37) Comprehensive income: Net income	--	--	--	--	--	--	--	--	--
227 -- Translation adjustments	--	--	--	--	--	--	--	--	--
25 Total comprehensive income	--	--	--	--	--	--	--	--	--
Balance at December 31, 1998 (Predecessor)	--	--	--	--	309	--	--	--	379
(12) Comprehensive income: Net income	--	--	--	--	--	--	--	--	--
1,878 -- Translation adjustments	--	--	--	--	--	--	--	--	--
(171) Total comprehensive income	--	--	--	--	--	--	--	--	--
-- -- Common stock issued	--	--	21,800,000	2	--	--	--	--	--
Balance at December 31, 1999	--	--	21,800,000	2	309	--	--	--	2,257
(183) Comprehensive income: Net income	--	--	--	--	--	--	--	--	--
1,456 -- Translation adjustments	--	--	--	--	--	--	--	--	--
(506) Total comprehensive income	--	--	--	--	--	--	--	--	--
-- -- Common stock issued to IP Fibre Devices Ltd. In satisfaction of $200,000 note payable and accrued interest	--	--	10,000,000	1	199	--	--	--	--
Common stock issued for notes receivable from stockholders at $1.00 per share	--	--	440,000	--	440	--	(440)	--	--
-- Issuance of Series A shares at $10.00 per share, net of issuance costs totaling $63	500,000	4,937	--	--	--	--	--	--	--
Warrants to issue common stock attached to Series B preferred stock	--	--	--	--	--	12,400	--	--	--
Accretion of Series A Preferred Stock	--	17	--	--	(17)	--	--	--	--
Accretion of Series B Preferred Stock	--	--	--	--	(152)	--	--	--	--
Distributions to shareholders	--	--	1,150,000	--	--	--	--	--	(9,940)
-- Equity-based compensation awarded	--	--	--	--	21,961	--	--	(21,961)	--
-- Amortization of equity-based compensation	--	--	--	--	--	--	--	8,719	--
-- Cash proceeds from exercise of stock options	--	--	590,934	--	672	--	--	--	--
Balance at September 30, 2000 (unaudited)	500,000	$4,954	33,980,934	$ 3	$23,412	$12,400	$(440)	$(13,242)	$(6,227)

$(689) Other Comprehensive Total Income (Loss) Balance at January 1, 1997 (Predecessor)... $ 295 Contributions from shareholders.... 129 Comprehensive income: Net income..... 24 $ 24 Translation adjustments..... (24) (24) Total

comprehensive income..... -- $ -- Balance at December 31, 1997 (Predecessor)... 424 Comprehensive income: Net income..... 227 $ 227 Translation adjustments..... 25 25 Total comprehensive income..... -- $ 252 Balance at December 31, 1998 (Predecessor)... 676 Comprehensive income: Net income..... 1,878 $ 1,878 Translation adjustments..... (171) (171) Total comprehensive income..... -- $ 1,707 Common stock issued..... 2 Balance at December 31, 1999..... 2,385 Comprehensive income: Net income..... 1,456 $ 1,456 Translation adjustments..... (506) (506) Total comprehensive income..... -- $ 950 Common stock issued to IP Fibre Devices Ltd. In satisfaction of $200,000 note payable and accrued interest..... 200 Common stock issued for notes receivable from stockholders at $1.00 per share..... -- Issuance of Series A shares at $10.00 per share, net of issuance costs totaling $63.... 4,937 Warrants to issue common stock attached to Series B preferred stock..... 12,400 Accretion of Series A Preferred Stock..... -- Accretion of Series B Preferred Stock..... (152) Distributions to shareholders.... (9,940) Equity-based compensation awarded..... -- Amortization of equity-based compensation.... 8,719 Cash proceeds from exercise of stock options... 672 Balance at September 30, 2000 (unaudited)..... $20,171 See notes to combined consolidated financial statements.

COMBINED CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

For the year ended December 31,			For the nine months ended September 30,	
1997	1998	1999	1999	2000
Predecessor			(unaudited)	

Cash flows from operating activities: Net income (loss)..... $ 24 $ 227 $ 1,878 $ 1,789 $ 1,456 Adjustment to reconcile net income (loss) to net cash provided by operating activities: Depreciation and amortization..... 277 738 1,543 1,032 1,542 Deferred income taxes..... (4) 43 (31) (27) (860) Equity-based compensation.. -- -- -- -- 8,719 Income (loss) related to minority interests..... 19 77 (69) (113) 242 Changes in assets and liabilities that provided (used) cash: Accounts receivable..... (809) (837) (145) (1,059) (10,596) Due to (from) affiliates, net..... 371 182 (434) (216) (515) Inventories..... (49) (286) (1,958) (1,666) (5,637) Prepaid expense and other assets..... 83 (218) 52 (75) (1,085) Accounts payable..... 143 1,848 1,401 677 1,592 Accrued expenses and other liabilities..... (7) 257 226 602 1,698 Income taxes payable..... 3 109 1,677 2,123 5,682 Net cash provided by operating activities..... 51 2,140 4,140 3,067 2,238 Cash flows from investing activities: Purchase of property, plant and equipment..... (1,292) (3,082) (5,167) (3,418) (10,161) Other..... -- 2 -- -- -- Net cash used in investing activities..... (1,292) (3,080) (5,167) (3,418) (10,161) Cash flows from financing activities: Proceeds from long-term borrowings..... 1,151 2,049 600 -- 1,822 Principal payments on borrowings..... (13) (81) (15) (11) (832) Net proceeds from line of credit agreements..... -- -- -- -- 1,750 Capital contributions from shareholders..... 129 -- -- -- -- Proceeds from Series A preferred stock, net..... -- -- -- -- 4,737 Proceeds from Series B preferred stock, net..... -- -- -- -- 74,635 Distributions to shareholders..... -- -- -- -- (9,940) Proceeds from exercise of stock options..... -- -- -- -- 672 Net cash provided by (used in) financing activities... 1,267 1,968 585 (11) 72,844 Effect of changes in exchange rates on cash..... (16) 59 (129) (97) 153 Net increase (decrease) in cash and cash equivalents.. 10 1,087 (571) (459) 65,074 Cash and cash equivalents, beginning of the year..... 214 224 1,311 1,311 740 Cash and cash equivalents, end of the year..... $ 224 $ 1,311 $ 740 $ 852 $ 65,814 Supplemental disclosures of

cash flow information: Cash paid for interest, net of amounts capitalized.... $ 106 $ 125 $ 298 $ 177 $ 125 Cash paid for taxes..... $ 3 $ 69 $ 491 $ 134 $ 372 Noncash transactions: Conversion of payable to Fibre for 10,000,000 shares of common stock.... -- -- -- -- $ 200 Accounts receivable paid with nonmarketable securities..... -- $ 46 -- -- -- Common stock issued for notes receivable from shareholders..... -- -- $ 2 $ 2 $ 440 Preferred stock issued for property, plant and equipment..... -- -- -- -- $ 200 Real estate acquired from shareholder through assumption of mortgage payable..... -- -- -- -- $ 345 Common stock issued to Fibre in connection with the 2000 Reorganization, 1,150,000 shares at par value..... -- -- -- -- -- See notes to combined consolidated financial statements.

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS (Information as of and for the nine months ended September 30, 1999 and 2000 is unaudited) 1. Description of Business and Basis of Presentation IPG Photonics Corporation (the "Company") was incorporated as a Delaware corporation on December 2, 1998. Since inception, the Company has been affiliated by common ownership with several entities, including NTO IRE-POLUS, Russia; IPG Laser GmbH, Germany ("Laser"); IPG Fibertech, Italy ("Fibertech"); and IP Fibre Devices Ltd. ("Fibre"), United Kingdom. The accompanying combined consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America and include the accounts of the Company, NTO IRE-POLUS, Laser and Fibertech (collectively, "IPG"). For purposes of presentation of the accompanying combined financial statements for the years ended December 31, 1997 and 1998, NTO IRE-POLUS, Laser and Laser's 80% owned subsidiary, Fibertech, are referred to as the "Predecessor." All intercompany transactions and balances have been eliminated.

During August 2000, the ownership of the Company and several affiliated companies was reorganized (the "2000 Reorganization"). The 2000 Reorganization was completed through several transactions. The Company initially purchased 50% of the shares of Laser from Fibre for $7.5 million in cash plus 1,150,000 common shares. In addition, the Company purchased an additional 4% of the shares of Laser from the Company's majority shareholder for $2.4 million in cash. Concurrently with these purchases, the Company was provided an option to purchase the remaining 46% of Laser from the Company's majority shareholder. On October 4, 2000, the Company exercised this option and obtained the remaining 46% ownership interest in Laser in exchange for 1,403,000 common shares of the Company. Through this series of transactions, Laser and its 80% owned subsidiary, Fibertech, became a wholly owned subsidiary of the Company. In addition to the 2000 Reorganization, the Company and NTO IRE-POLUS have entered into an agreement in principle that will result in the Company acquiring a 51% interest in NTO IRE-POLUS. The NTO IRE-POLUS transaction is expected to close in January 2001. Because the transaction with NTO IRE-POLUS has received approval from the shareholders and no other significant impediments exist which would preclude the transaction from closing, management has included NTO IRE- POLUS, with a 49% minority interest, in the combined consolidated financial statements for all periods presented. Because all of these entities have been under common managerial, operational and shareholder control since inception, the transfers of interest are accounted for in the combined consolidated financial statements as a reorganization of companies under common control in a manner similar to a pooling of interests.

IPG designs, manufactures and sells high-power fiber amplifiers, Raman pump lasers and fiber lasers for telecommunications and industrial applications. IPG's telecommunications products are used in the long-haul, metropolitan and access sectors of optical communications networks. IPG's industrial products are used for marking, printing, material processing, micro- machining, optical sensing and measurement and laboratory and medical equipment. IPG's administrative and manufacturing facilities in the United States are presently located in Sturbridge, Massachusetts, and European operations are located in Burbach, Germany, and Milan, Italy. Manufacturing activities and research and development are also conducted in Friazino, Russia.

Interim financial data--The interim combined consolidated financial information at September 30, 2000 and for the nine months ended September 30, 1999 and 2000 is unaudited but, in the opinion of management, includes all adjustments, which management considers necessary for a fair presentation of the combined consolidated financial position and results of operations for the interim periods. The results of operations for the nine months ended September 30, 2000 are not necessarily indicative of the results to be expected for the full fiscal year.

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) 2. Summary of Significant Accounting Policies Use of estimates--The preparation of the combined consolidated 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 and disclosure of contingent assets and liabilities at the date of the combined consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Foreign currency translation--The U.S. dollar has been adopted as the reporting currency for all periods presented. The financial information for entities outside the United States is measured using local currencies as the functional currency. 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. Exchange rate differences due to transactions in foreign currencies are reflected in the consolidated statements of income. Due to the highly inflationary economy in Russia, the financial statements of NTO IRE-POLUS are translated at either current or historical exchange rates as appropriate, with all currency adjustments included in the combined consolidated statements of operations.

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. Cash and cash equivalents include cash restricted under certain Company debt agreements (See Note 6).

Inventories--Inventories are stated at the lower of cost or market on a first-in, first-out basis. IPG's inventories include parts and components that may be specialized in nature and subject to rapid obsolescence. While IPG considers obsolescence in estimating required allowances to reduce recorded

amounts to the lower of cost or market values, such estimates could change in the future.

Property, plant and equipment--Property, plant and equipment is stated at cost less accumulated depreciation. Depreciation is calculated 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 not exceed the remaining term of the corresponding lease. The following table presents the assigned economic useful lives of IPG's property, plant and equipment:

Category Economic useful life

Buildings	30 years
Machinery and equipment	3-5 years
Office furniture and fixtures	3-5 years
Computer equipment	3 years
Other assets	3-5 years

Expenditures for maintenance and repairs are charged to operations. Cost includes capitalized interest associated with significant capital projects. For the years ended December 31, 1997, 1998 and 1999, IPG capitalized interest totaling $16,000, $70,000 and $0, respectively. For the nine months ended September 30, 1999 and 2000, IPG capitalized interest totaling $0 and $152,000, respectively.

Revenue recognition--Revenue on product sales is recognized at the point in time when persuasive evidence of an arrangement exists, the price is fixed and final, delivery has occurred and there is a reasonable assurance of collection of the sales proceeds. IPG generally obtains oral or written purchase authorizations from its customers for a specified amount of product at a specified price and considers delivery to have occurred at the point of shipment. IPG has no obligation to provide upgrades, enhancements or customer support NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) subsequent to the sale. IPG's products carry a warranty against defect for a period of one or two years, depending upon the product type. The expected cost associated with these warranty obligations is recorded when the revenue is recognized.

Impairment of long-lived assets--Long-lived assets, which are comprised 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 where undiscounted expected future cash flows are less than the carrying value, an impairment loss is recognized equal to an amount by which the carrying value exceeds the fair value of assets. No impairment provisions have been recognized to date.

Advertising expense--The cost of advertising is expensed as incurred. IPG conducts substantially all of its sales and marketing efforts through trade shows and professional and technical conferences. IPG's advertising costs for the years ended December 31, 1997, 1998, and 1999, and for the nine months ended September 30, 1999 and 2000 were not significant.

Research and development--Internal research and development costs are expensed as incurred.

Income taxes--IPG accounts for income taxes under the provisions of Statement of Financial Accounting Standards ("SFAS") No. 109, Accounting for Income Taxes. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences of temporary differences between

the carrying amounts and tax bases of assets and liabilities and net operating loss carryforwards using enacted rates. Valuation allowances are provided against assets that are not likely to be realized.

Equity-based compensation--SFAS No. 123, Accounting for Stock-Based Compensation, encourages but does not require companies to record compensation cost for stock-based employee compensation plans at fair value. As permitted by SFAS No. 123, IPG has elected to account for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations including Financial Accounting Standards Board ("FASB") Interpretation No. 44, Accounting for Certain Transactions Involving Stock Compensation--an Interpretation of APB Opinion No. 25, and has adopted the disclosure-only provisions of SFAS No. 123. Accordingly, for financial reporting purposes, compensation cost for stock options is measured as the excess, if any, of the estimated fair market value of the Company's stock at the date of the grant over the amount an employee must pay to acquire the stock. Equity instruments issued to nonemployees are accounted for in accordance with SFAS No. 123.

Concentration of credit risk--Financial instruments that potentially subject IPG to credit risk consist primarily of cash and cash equivalents and accounts receivable. IPG maintains substantially all of its cash in a single financial institution, which is believed to be a high-credit, quality financial institution. IPG grants credit to customers in the ordinary course of business and provides a reserve for potential credit losses. Such losses have been within management's expectations. See discussion related to significant customers in Note 13.

Fair value of financial instruments--IPG's financial instruments consist of accounts receivable, accounts payable, and notes payable. 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. The fair value ascribed to the warrants issued in connection with the Series B Preferred Stock has been determined from an independent appraisal.

Comprehensive income--SFAS No. 130, Reporting Comprehensive Income, established standards for reporting and displaying comprehensive income and its components within the financial statements. Comprehensive income includes charges and credits to equity that are not the result of transactions with shareholders. Included in other comprehensive income for IPG is the cumulative translation adjustments related NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) to the net assets of the operations in Germany and Italy. These adjustments are accumulated within the statement of shareholders' equity under the caption, accumulated other comprehensive income (loss).

Segment information--SFAS No. 131, Disclosures about Segments of an Enterprise and Related Information, was adopted by IPG in 1998 and established standards for the reporting of information about operating segments in annual and interim financial statements. Operating segments are defined as components of an enterprise for which separate financial information is available that is evaluated regularly by the chief operating decision makers in deciding how to allocate resources and in assessing

performance. SFAS No. 131 also requires disclosures about products and services, geographic areas and major customers. The adoption of SFAS No. 131 did not affect results of operations or financial position but did affect the disclosure of segment information.

Recently issued accounting standards--In June 1998, the FASB issued SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities. This statement establishes accounting and reporting standards requiring that derivative instruments (including certain derivative instruments embedded in other contracts) be recorded in the balance sheet as either an asset or liability measured at its fair value. In June 1999, the FASB issued SFAS No. 137, Accounting for Derivative Instruments and Hedging Activities, Deferral of the Effective Date of FASB Statement No. 133, to defer the effective date of SFAS No. 133. SFAS No. 133, as amended, is effective for the IPG beginning January 1, 2001. Because IPG has not utilized derivative instruments for hedging purposes or interest rate management, management does not believe that the adoption of this statement will have a significant impact on operations or financial condition.

3. Net Income Per Share and Pro Forma Financial Data Net income per share--Basic net income per share amounts for the year ended December 31, 1999 and for the nine months ended September 30, 1999 and 2000 are computed by dividing net income available to common shareholders by the weighted-average common shares of the Company outstanding during those periods. For purposes of computing net income per share, the common stock that was issued to the founders, the common stock issued to Fibre in satisfaction of certain liabilities and the stock issued to Fibre in connection with the 2000 Reorganization are considered nominal issuances and have been treated in a manner similar to a stock split or stock dividend. Diluted net income per share reflects the potential dilution that could occur if (i) the Series A and Series B preferred stock is converted to common stock, and (ii) options issued under the Company's stock compensation plan and the common stock warrants attached to the Series B preferred stock were exercised. Net income per share amounts for the Predecessor have not been reported for the years ended December 31, 1997 and 1998 due to the closely held nature of these entities, and as such, per share amounts would not be meaningful.

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) A summary of the weighted-average number of common shares and weighted- average number of common shares and common equivalent shares follows:

	Year ended	Nine months ended September 30,	
	December 31, 1999	1999	2000
Basic weighted-average ordinary common shares outstanding.....	32,950,000	32,950,000	33,635,858
Weighted-average common equivalent shares.....	808,500	735,000	2,611,902
Diluted weighted-average common shares outstanding.....	33,758,500	33,685,000	36,247,760

Pro forma financial data--The Board of Directors has authorized the filing of a registration statement with the Securities and Exchange Commission that would permit the Company to sell shares of the Company's common stock in connection with a proposed initial public offering ("IPO"). If the offering

is consummated under the terms presently anticipated, all of the outstanding shares of the Company's Series A and Series B preferred stock will automatically convert into shares of common stock upon the closing of the IPO. The conversion of the preferred stock has been reflected in the accompanying unaudited pro forma combined consolidated balance sheet. Pro forma basic and diluted net loss per share data assuming conversion of the Series A and Series B preferred stock into shares of common stock had occurred from the date of original issuance of the preferred stock. In addition, no effect is given to accretion of the preferred stock for purposes of this computation. Shares used in computing pro forma basic and diluted net income per share aggregated 34,311,682 and 36,247,760, respectively, for the nine months ended September 30, 2000.

4. Inventories

Inventories consist of the following (in thousands):

December 31, ---------- September 30, 1998 1999 2000

Components and raw materials	$471	$2,139	$6,756
Work in process	43	225	661
Total	$514	$2,364	$7,417

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) 5. Property, Plant and Equipment Property, plant and equipment consists of the following (in thousands):

December 31, ---------- September 30, 1998 1999 2000

Land	$ 72	$ 1,030	$ 1,184
Buildings	2,642	2,514	2,476
Machinery and equipment	2,642	5,398	7,373
Office furniture and fixtures	248	523	714
Construction in progress	295	420	7,324
	5,899	9,885	19,071
Accumulated depreciation	(1,293)	(2,552)	(3,524)
Total	$ 4,606	$ 7,333	$15,547

6. Debt

Debt consists of the following (in thousands):

December 31, ---------- September 30, 1998 1999 2000 U.S. demand line of credit..... $ -- $ -- $ 1,750 U.S. construction loan..... -- -- 531 U.S. dollar mortgage note payable, collateralized by land, 10% fixed rate, maturing November 2001 (paid in March 2000)..... -- 600 -- Euro credit facility, collateralized by substantially all assets of Laser and the personal guaranty of the majority shareholder, 5.25% fixed rate, maturing September 2010..... -- -- 1,349 Deutsche mark note payable, collateralized by guaranty of majority shareholder, 6% adjustable not to exceed 10%, maturing September 2006..... 2,028 1,746 1,528 Deutsche mark note payable, collateralized by property, plant and equipment, 4.5% fixed rate, maturing semi-annually through March 2008..... 2,147 1,848 1,517 Deutsche mark notes and mortgages payable, collateralized by property, plant and equipment ranging from 4.7% to 6.25% at fixed rates and variable rates, maturing monthly through January 2019..... 443 363 624 Deutsche mark overdraft facility..... -- -- -- Related party note payable to Fibre, unsecured, 6.0% fixed rate, due March 2000..... 98 89 -- Long-term debt..... 4,716 4,646 7,299 Less current

portion..... (21) (225) (1,982) Total..... $4,695 $4,421 $ 5,317 NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) Principal maturities of long-term debt as of December 31, 1999 are as follows (in thousands):

2000	$ 225
2001	252
2002	254
2003	256
2004	258
2005 and thereafter	3,401
Total	$4,646

U.S. demand line of credit--In March 2000, the Company negotiated a demand line of credit facility with available principal totaling $4.0 million, expiring May 31, 2001. Outstanding principal on this facility bears interest at a monthly adjustable rate of London Interbank Offering Rate ("LIBOR") plus 2.75% (9.4% at September 30, 2000). This facility is collateralized by substantially all the assets of the Company, a guaranty from Fibre, and a personal guaranty of the Company's majority shareholder.

U.S. construction loan--In April 2000, the Company entered into a $6.5 million construction loan facility to finance construction of new administrative and manufacturing facilities in Massachusetts. The construction loan has an initial term of nine months during which time interest only payments are due monthly. After the construction period, principal payments are due for five years, at which time the outstanding balance is due. During the construction period the construction loan bears interest at LIBOR plus 3% (9.6% at September 30, 2000) and at a fixed rate equal to the Five-Year Treasury Rate plus 3% for the five-year term following the construction period. This facility is collateralized by substantially all the assets of the Company, including the related real estate and building construction. Subsequent to September 30, 2000, the Company placed $12,560,000 in a restricted overnight investment account which is available to the bank to offset the Company's obligations under the facilities.

The demand line of credit and the construction loans contain cross- defaults and certain restrictive covenants, including maintenance of specific financial ratios. The most restrictive provisions of the Company's borrowing arrangements are as follows: a ratio of total debt to tangible capital of no more than 3.4 to 1 at December 31, 2000, and the debt service coverage ratio should not be below 2.0 to 1 for the year ending December 31, 2000.

Euro construction loan--During 2000, Laser entered into a financing agreement with a syndicate of banks. The syndicate has provided available credit of (Euro)10.0 million (or $8.8 million) to finance construction of a new manufacturing facility in Germany and to meet the working capital needs of Laser. Principal payments are due semiannually beginning in September 2002 through September 2010. Interest accrues at 5.25%.

Deutsche mark ("DM") overdraft facility--In March 2000, Laser negotiated a syndicated overdraft facility with available principal of DM 4.7 million (or $2.1 million). This facility bears interest at market rates that vary depending upon the principal outstanding (from 9.125% to 10.5% at September 30, 2000). The facility is payable upon demand. No principal was outstanding at September 30, 2000. This facility and the Euro construction loan are collateralized by a common pool of the assets of Laser.

7. Shareholders' Equity Predecessor equity Laser has authorized capital totaling DM500,000, all of which was outstanding at December 31, 1998, 1999 and September 30, 2000. NTO IRE-POLUS has issued capital totaling 20.0 million Russian rubles, all of which was outstanding at December 31, 1998, 1999 and September 30, 2000. The equity of the Predecessor entities has been reported as additional paid-in capital in the combined consolidated financial statements.

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) Common stock The Company was incorporated on December 5, 1998 at which time 10,000 common shares (par value $0.01) were authorized. On December 28, 1999, total authorized shares were increased to 50 million and the par value was changed to $0.0001 per share. The founding shareholders then subscribed for 21,800,000 shares for total consideration of $2,000.

In January 2000, Fibre paid $18,000 in cash to the Company and converted an intercompany note payable and related accrued interest totaling $182,000 into 10,000,000 shares of common stock.

Reserved shares

In addition to the shares of common stock reserved for issuance under the Company's stock option plan, the Company has reserved a sufficient number of shares of common stock for potential conversion of the Series A and Series B preferred stock and for the exercise of outstanding common stock warrants.

Preferred stock

The Company has authorized 5,000,000 shares of preferred stock, par value of $0.0001, of which 500,000 shares have been designated as Series A convertible preferred stock (the "Series A Preferred Stock"); 3,800,000 shares have been designated as Series B redeemable convertible preferred stock (the "Series B Preferred Stock").

On March 31, 2000, the Company issued 500,000 shares of Series A Preferred Stock for total consideration of $5.0 million. Issuance costs of $63,000 are being accreted to the liquidation value of the Series A Preferred Stock through March 31, 2002, the first conversion date.

In August 2000, the Company issued 3,000,000 shares of Series B Preferred Stock and warrants to purchase shares of the Company's common stock (the "Series B Warrants") for total consideration of $75.0 million. Issuance costs totaled $363,000. The Series B warrants issued in connection with the sale of the Series B preferred stock have been valued at $12.4 million. The Series B Preferred Stock is being accreted to redemption value over the period to the Series B Preferred Stock's scheduled redemption dates of August 25, 2006, 2007 and 2008.

Subsequent to September 30, 2000, the Company issued an additional 800,000 shares of Series B Preferred Stock and Series B Warrants for total consideration of $20.0 million. The Series B Warrants have been valued at $3.3 million.

Activity with respect to the Series B Preferred Stock is as follows:

Number of Shares Amount Outstanding (in thousands)

Balance, January 1, 2000.....	--	--
Proceeds from sale of Series B Preferred Stock, net of issuance costs.....	3,000,000	$62,237
Accretion related to issuance cost and Series B Warrants.....		152
Balance, September 30, 2000.....	3,000,000	$62,389

The rights and preferences of the Series A and Series B Preferred Stock are as follows:

Dividends--The holders of the Series B Preferred Stock are entitled to receive cumulative dividends at the rate paid on the common shares.

Liquidation--In the event of any voluntary or involuntary liquidation, dissolution or merger of the Company, each holder of the Series A and Series B Preferred Stock will be entitled to be paid, before any NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) distributions are made to the common shareholders, a liquidation preference. The holders of the Series A Preferred Stock will be entitled to be paid an amount equal to the preference value of $10.00 per share plus accrued dividends, and the holders of the Series B Preferred Stock will be entitled to be paid an amount equal to the preference value of $25.00 per share plus accrued dividends. After such distributions, the holders of the Series A Preferred Stock do not participate in any further distributions. The holders of the Series B Preferred Stock participate in further available distributions in the amount that would have been payable per share if the holders of the Series B Preferred Stock had been converted to common shares. If the total payout under the investors participation rights exceeds $100.00 per share, the preference amount declines linearly from $25.00 per share to $0 as the participation amount payout increases from $100.00 to $125.00. If the assets are not sufficient to generate cash sufficient to pay in full the Series A and Series B preference values, then the holders of the Series A and Series B Preferred Stock will be entitled to share ratably in any distribution of cash generated by assets in accordance with the respective amounts that would have been payable in such distribution if the amounts to which the holders of the Series A and Series B Preferred Stock are paid in full. All assets remaining after distribution to the holders of Series A and Series B Preferred Stock are available for distribution to the holders of the Company's common shares.

Voting Rights--The holders of the Series A Preferred Stock, except with respect to the matters regarding the rights and preferences of their own shares, are not entitled to vote on any matter. The holders of the Series B Preferred Stock are entitled to a number of votes equal to the number of shares of common stock into which such Series B Preferred Stock are then convertible, and voting together as a separate class, are entitled to elect one director of the Company.

Redemption--At the election of the holders of the Series B Preferred Stock, the Company is obligated to redeem up to 33.3% after August 25, 2006, up to 66.7% after August 25, 2007 and up to 100% after August 25, 2008 of the outstanding Series B Preferred Stock at a redemption price equal to $25.00 per share plus accrued and unpaid dividends. In the event that the Company has insufficient funds to redeem the shares, the Series B Preferred Stock will accrue interest at a rate equal to the prime rate plus 3%.

Conversion--The Series A Preferred Stock has a preference value of $10.00 per share and is convertible at the option of the holder at any time subsequent to March 31, 2002 into the number of shares of common stock of the Company as is determined by dividing the preference value by the conversion price then in effect. Immediately following an IPO or consummation of a sale or merger of the Company, all Series A Preferred Stock shall automatically convert into the number of common shares of the Company as is determined by dividing the preference value by the conversion price then in effect.

The Series B Preferred Stock has a conversion value of $25.00 per share and is convertible at the option of the holder into the number of common shares of the Company as is determined by dividing the preference value by the conversion price then in effect. All Series B Preferred Stock automatically converts into the number of common shares of the Company as is determined by dividing the preference value by the conversion price then in effect upon the completion of a qualifying public offering. A qualifying public offering is defined as an offer of the Company's common stock (i) registered under the Securities Act of 1933, (ii) with gross proceeds in excess of $100.0 million, and (iii) at a specified offering price which graduates from $40.00 per share at December 31, 2000 to $62.50 per share at August 31, 2002.

The holders of Series A and Series B Preferred Stock have certain tag- along and drag-along rights, as described in the articles of incorporation.

Registration Rights--If the Company at any time proposes to register any of its common shares under the Securities Act of 1933, the holders of the Series B Preferred Stock are entitled to participate in such registration. In addition, the holders of the Series A Preferred Stock may require the Company to file one, and the holders of the Series B Preferred Stock may require the Company to file up to two, registration statements NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) under the Securities Act of 1933 at the expense of the Company with respect to their shares (the "Demand Registration Rights"). These Demand Registration Rights become effective if a registration has not occurred prior to March 31, 2003 for the Series A Preferred Stock or August 31, 2003 for the Series B Preferred Stock. The holders of the Series B Preferred Stock who convert their preferred stock to common stock in connection with an IPO may also require the Company to file additional registration statements.

Warrants

In connection with the issuance of the Series B Preferred Stock, the Company issued Series B Warrants to purchase, in the aggregate, $18.8 million of the Company's common shares at an equivalent per share price of 50% of the fair value of such shares. The fair value of the Series B Warrants, approximating $12.4 million, was deducted from the proceeds of the Series B Preferred Stock and was allocated to the Series B Warrants. The Series B Warrants are exercisable upon the completion of an IPO or sale of a significant portion of the Company's assets and are being accreted to the carrying value of the Series B Preferred Stock through the scheduled redemption dates of the Series B Preferred Stock. These warrants expire in August 2007. In connection with the Series B Preferred Stock that was issued subsequent to September 30, 2000, the Company issued Series B Warrants to purchase, in the

aggregate, $5.0 million of the Company's common stock at an equivalent per share price of 50% of the fair value of such shares. The fair value of the Series B Warrants related to the issuance of Series B Preferred Stock subsequent to September 30, 2000 approximates $3.3 million.

Notes receivable from sales of shares The Company has received notes from a Company director in connection with the director's exercise of nonqualified stock options in March 2000 as well as the issuance of common stock under a professional services contract with the director. The notes receivable have principal balances of $190,000 and $250,000 and are full recourse promissory notes bearing interest at 6.8% and 6.0% and are collateralized by the shares of the Company's common stock held by the director. Principal is due through November 2005. The notes receivable are presented on the combined consolidated balance sheet as a reduction to shareholders' equity.

Additionally, the Company issued 21,800,000 shares of common stock to the founding shareholders in January 1999 in exchange for notes. These shares were fully paid in October 2000 and have been reported as current assets and shareholders' equity at December 31, 1999 and at September 30, 2000.

Minority interests

Minority interests reported in the accompanying combined consolidated financial statements are comprised of 20% of Fibertech held by the management of Fibertech and 49% of NTO IRE-POLUS held by certain shareholders of the Company, IPG employees and other unrelated parties.

8. Related Party Transactions The Company and the other members comprising IPG have entered into certain transactions with other entities affiliated with IPG. These entities which have not been combined or consolidated in the accompanying financial statements include Fibre, IP Fibre Optics Ltd., IPC Inc., and VPG Laser Components GmbH (the "Non-Group Affiliates"). The related party transactions included in the accompanying financial statements are primarily comprised of intercompany sales and costs of sales with the Non-Group Affiliates. Additionally, effective January 1, 2000, the Company entered into a management agreement with Fibre, under which Fibre provides accounting advice and consulting services for a monthly fee of $8,000 plus expenses. The initial term of the agreement is for one year.

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) The transactions with Non-Group Affiliates are included in the combined consolidated statements of income as follows (in thousands):

	Years ended December 31,			Nine months ended September 30,	
	1997	1998	1999	1999	2000
Net sales	$ 811	$ 1,103	$ 639	$ 524	$ 602
Purchases included in cost of sales	528	798	263	236	--
Operating expenses	--	32	47	32	138
Interest income (expense), net	10	10	17	7	--

Amounts included in the combined consolidated balance sheets are as follows (in thousands):

December 31, --------- September 30, 1998 1999 2000

Amounts due from Non-Group Affiliates:			
IP Fibre Devices Ltd.	$ 70	$221	$560
IPC Inc.	345	--	--
Total	$415	$221	$560
Amounts due to Non-Group Affiliates:			
IP Fibre Devices Ltd.	$--	$309	$--
IPC Inc.	665	12	--
VPG Laser Components GmbH	70	33	--
Total	$735	$354	$--

In May 2000, Laser entered into an agreement with a shareholder holding more than 5% of the Company's common stock to purchase real estate located in Burbach, Germany, in exchange for assuming the outstanding mortgage on the real estate and a payment of approximately $84,000, which approximated the fair market value of the real estate. Prior to purchasing the real estate, Laser had been renting the Burbach real estate from the shareholder for approximately $4,000 per month.

In March 2000, the Company entered into a professional services contract for advisory services with a member of the National Advisory Board. The compensation for these services was the right to purchase 250,000 shares of the Company's common stock at $1.00 per share. The Company has recognized $750,000 in equity-based compensation in respect of this contract.

9. Commitments and Contingencies Operating leases The Company leases its current facility in the United States under a noncancelable operating lease agreement which expires during 2001. Rental expense under this lease agreement for the years ended December 31, 1999, and for the nine months ended September 30, 1999 and 2000 was approximately $121,000, $60,000 and $172,000, respectively. Future minimum lease payments under noncancelable leases as of December 31, 1999 are approximately $225,000 and $113,000 for the years ending December 31, 2000 and 2001, respectively.

Firm purchase commitments In December 2000, the Company entered into a purchase agreement with a component supplier requiring minimum purchases by the Company of approximately $66.7 million through December 31, 2002.

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) The Company has a variety of commitments with suppliers for the purchase raw materials and components for delivery in future years at prevailing market prices.

Capital expenditures

In 2000, the Board of Directors authorized expenditures on the construction of a new manufacturing and administrative facility in the United States with a total projected cost of $11.8 million, all of which has been contractually committed at September 30, 2000. As of September 30, 2000, approximately $3.2 million has been paid under these contracts. This project is expected to be completed in the first quarter of 2001.

Employment agreements IPG has entered into employment agreements with certain members of senior management. The terms of these agreements range from one to five years and include noncompete and nondisclosure provisions as well as provide for defined severance payments in the

event of termination.

Litigation

The Company is not currently subject to any material legal proceedings, nor does the Company know of any pending material legal proceedings.

10. Employee Benefit Plans Profit Sharing Plan IPG maintains a 401(k) profit-sharing plan covering substantially all U.S. employees. Employees are eligible for a discretionary contribution from IPG based on each employee's total contribution, not to exceed 6% of an employee's compensation. Compensation expense related to this plan for the years ended December 31, 1999 and for the nine months ended September 30, 1999 and 2000 approximated $18,000, $9,000 and $46,000, respectively.

Employee Stock Option Plan Beginning in 1999, the Company's majority shareholder and sole member of the Board of Directors, at that time, granted stock options to certain employees, officers and advisors. In April 2000, the shareholders approved the IPG 2000 Incentive Compensation Plan (the "Plan"). At September 30, 2000, 3,750,000 common shares had been reserved for grant under the Plan. Subsequent to September 30, 2000, the Board of Directors increased the number of shares reserved under the Plan to 7,500,000. At November 30, 2000, after giving effect to the increase in the number of reserved shares, an additional 4,541,300 shares were issued under the Plan. Options are subject to the vesting provisions associated with each grant, generally vesting over a three or four year period. All options expire ten years from the date of grant.

In addition to the Plan, the Company issued 550,000 options to purchase the Company's common stock to the members of its National Advisory Board and other consultants during 2000 of which 450,000 have been exercised. These options have similar terms to those options issued under the terms of the Plan; however, these options which have been issued outside of the Plan generally vested immediately. These grants have been recorded using the fair value methodologies required by SFAS No. 123.

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) The following table presents a summary of the share option activity and related information:

Number of Weighted-Average Options Exercise Price

Outstanding, January 1, 1999	--	
Granted	1,100,000	$1.00
Exercised	--	
Forfeited	--	
Outstanding, December 31, 1999	1,100,000	1.00
Granted	2,159,300	1.20
Exercised	(780,934)	1.19
Forfeited	(600)	1.00
Outstanding, September 30, 2000	2,477,766	$1.14

The weighted-average minimum fair value of the options granted was $0.16 in 1999 and $5.53 in 2000. The fair value of the options issued outside of the Plan during 2000 was estimated at $10.00.

Additional information regarding options outstanding at September 30, 2000 is as follows:

Exercise Price	Options Outstanding Number Outstanding	Weighted-Average Remaining Contractual Life (years)	Number Exercisable December 31, 1999	Number Exercisable September 30, 2000
$1.00	2,181,816	9.02	--	179,050
$2.00	250,250	9.84	--	--
$3.00	45,700	9.86	--	5,000
	2,477,766		--	184,050

Compensation related to options awarded during 2000 (approximately $22.0 million) has been deferred for financial reporting purposes and is being amortized over the vesting period of the related options.

The Company has adopted the disclosure requirements of SFAS 123. SFAS 123 requires that the fair value of stock-based awards to employees be calculated through the use of option pricing models, even though such models were developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which significantly differ from the Company's stock option awards. These models also require subjective assumptions, which greatly affect the calculated values. IPG's calculations were made using the minimum value method with the following weighted average assumptions: expected life, 4 years; stock volatility of 0%; risk-free interest rate of 6.5%; and no dividend payments during the expected term. Forfeitures are recognized as they occur.

The Company has utilized the Black-Scholes option-pricing model in determining the fair value of the options granted outside of the Plan. In addition to the aforementioned assumptions, the Company used a volatility factor of 120% in the Black-Scholes option-pricing model.

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) If the computed minimum values of the stock awards had been amortized to expense over the vesting period of the awards, net income and related pro forma diluted per share amounts would have been reduced to the pro forma amounts indicated below:

For the nine For the year ended months ended December 31, 1999 September 30, 2000

Net income available to common shareholders (in thousands):		
As reported	$1,878	$1,287
Pro forma	1,833	790
Diluted net income per share:		
As reported	$ 0.05	$ 0.04
Pro forma	0.05	0.02

Subsequent to September 30, 2000, the Company entered into an employment agreement which granted this employee the right to purchase 500,000 shares of common stock at the price of $1.00 per share, subject to certain repurchase rights by the Company. The Company also granted this employee an option to purchase (i) 250,000 shares of common stock at $3.00 per share, which will vest on the earlier of October 1, 2001 or the date that IPG first recognizes $200.0 million of gross sales, and (ii) 750,000 shares, which vest monthly for thirty- six months and will all vest immediately on the date IPG first recognizes $400.0 million of gross sales. Additionally, subsequent to September 30, 2000, the Company issued options to purchase 352,000 shares of common stock to employees and members of the Board of Directors at a weighted-average exercise price of $7.39 per share.

11. Income Taxes

Income before minority interest and income taxes consisted of (in thousands):

Years ended December 31, 1997 1998 1999 Domestic..... $-- $-- $ 375
Foreign..... 74 538 3,640 Total..... $ 74 $538 $4,015
The Company's provision for income taxes consisted of the following (in thousands):

Years ended December 31, 1997 1998 1999

Current:			
Federal	$--	$--	$ 151
State	--	--	46
Foreign	35	191	2,040
Deferred:			
Federal	--	--	(31)
State	--	--	(9)
Foreign	(4)	43	9
Total	$ 31	$234	$2,206

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) The provision for income taxes is different from that which would be obtained by applying the statutory federal income tax rate to income before income taxes. The principal items causing this difference are as follows (in thousands):

	Years ended December 31,			September 30,	
	1997	1998	1999	1999	2000
Tax expense (benefit) at statutory rate	$ 25	$ 183	$ 1,365	$1,346	$2,156
State and local taxes	--	--	23	(3)	253
Differences in federal and foreign tax rates	1	79	689	777	1,352
Nondeductible equity-based compensation	--	--	--	--	768
Tax credits	--	(50)	(32)	--	(79)
Nondeductible items and other	5	22	161	112	189
Total	$ 31	$ 234	$ 2,206	$2,232	$4,639

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

Years ended December 31, ---------- September 30, 1998 1999 2000

Current deferred tax assets (liabilities):			
Deferred revenues	$ (45)	$ --	$ --
Allowances and accrued liabilities		86	163
Net current deferred tax assets (liabilities)	$ (45)	$ 86	$ 163
Long-term deferred tax assets (liabilities):			
Property, plant and equipment	$ 52	$ (50)	$ (103)
Deferred compensation			841
Net long-term deferred tax assets (liabilities)	$ 52	$ (50)	$ 738

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) 12. Geographic and Segment Information IPG markets and sells its products throughout the world through both direct sales and distribution channels. The Company has adopted SFAS No. 131, Disclosures about Segments of an Enterprise and Related Information, and applies those criteria in reporting segment information. IPG currently manages its business as three segments: U.S.A., Germany, and Russia. The segments are considered to share similar economic characteristics and similarities in product, types of customers and methods of distribution. Accounting policies of the segments are the same as those described in the Summary of Significant Accounting Policies in Note 2. All intercompany transactions between segments have been eliminated. The following table summarizes net sales, operating expenses, net income (loss), identifiable assets, current liabilities and capital expenditures of IPG's in its market segments (in thousands):

	U.S.A.	Germany	Russia	Intercompany Eliminations	Total
September 30, 2000:					
Net revenues	$29,756	$21,149	$3,118	$(21,511)	$ 32,512
Operating expenses	11,947	2,824	673	--	15,444
Net income (loss)	(1,536)	3,245	172	(425)	1,456
Assets	86,848	18,683	1,512	(3,597)	103,446
Current liabilities	8,754	8,721	690	(3,017)	15,148
Capital expenditures	4,974	4,927	260	--	10,161
December 31:					
1999:					
Net revenues	$ 9,763	$16,535	$1,845	$ (9,506)	$ 18,637
Operating expenses	1,498	3,368	272	--	5,138
Net income (loss)	215	1,897	(72)	(162)	1,878
Assets	6,001	10,103	452	(3,413)	13,143
Current liabilities	5,136	4,110	114	(3,252)	6,108
Capital expenditures	2,863	2,272	32	--	5,167
1998:					
Net revenues	$ --	$ 8,263	$1,361	$ (1,335)	$ 8,289
Operating expenses	--	2,056	198	--	2,254
Net income	--	154	73	--	227
Assets	--	8,819	575	(259)	9,135
Current liabilities	--	3,682	93	(259)	3,516
Capital expenditures	--	3,080	2	--	3,082
1997:					
Net revenues	$ --	$ 3,097	$1,032	$ (1,005)	$ 3,124
Operating expenses	--	622	231	--	853
Net income	--	6	18	--	24
Assets	--	3,456	393	(112)	3,737
Current liabilities		801	56	(112)	745
Capital expenditures	--	1,292	--		1,292

NOTES TO COMBINED CONSOLIDATED FINANCIAL STATEMENTS--(Continued) The geographic sources of IPG's revenues, based on billing addresses of IPG's customers, are as follows (in thousands):

	Years ended December 31,			Nine months ended September 30,	
	1997	1998	1999	1999	2000
North America	$1,581	$5,369	$11,729	$ 9,219	$23,261
Europe	1,287	2,028	5,051	3,835	5,270

Asia and other	256	892	1,857	1,777	3,981
Total	$3,124	$8,289	$18,637	$14,831	$32,512

Through September 30, 2000, IPG has derived revenues from two product lines: fiber amplifiers and Raman pump lasers for telecommunications applications and fiber lasers for industrial applications. While complete financial information for these product lines is not available, IPG has identified its historic net sales for these product lines as follows (in thousands):

	Years ended December 31,			Nine months ended September 30,	
	1997	1998	1999	1999	2000

Telecommunications..... $1,898 $5,957 $14,383 $11,394 $25,106 Industrial applications..... 1,226 2,332 4,254 3,437 7,406 Total..... $3,124 $8,289 $18,637 $14,831 $32,512 13. Significant Customers IPG's largest customers are national and international telecommunications companies. IPG has five customers that individually comprised more than 10% of net sales. The following table presents the percentage of net sales that these customers represent during each period:

	Years ended December 31,			Nine months ended September 30,	
Customer	1997	1998	1999	1999	2000
A	--	2%	9%	2%	40%
B	15%	43%	40%	50%	20%
C	27%	2%	--	--	--
D	25%	9%	2%	3%	--
E	--	--	10%	12%	3%
Total	67%	56%	61%	67%	63%

Accounts receivable related to these five customers totaled approximately 69% of the September 30, 2000 accounts receivable balance.

In September 1999, Fibre entered into an agreement with Customer A in which Fibre granted Customer A 36 months of worldwide exclusivity for the purchase and use of free space optical point-to-multipoint terrestrial laser communication systems limited to one or more Watt amplifiers. Fibre, Laser and certain shareholders maintain an insignificant ownership interest in Customer A.

Through and including , 2001 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Shares

IPG Photonics Corporation

[Logo]

Common Stock

Prospectus

Merrill Lynch & Co.

Robertson Stevens

CIBC World Markets

U.S. Bancorp Piper Jaffray Wit SoundView , 2001

Part Ii

Information Not Required in Prospectus

Item 13. Other Expenses of Issuance and Distribution.

The following are the estimated expenses to be incurred in connection with the issuance and distribution of the securities registered under this Registration Statement, other than underwriting discounts and commissions. All amounts shown are estimates except the Securities and Exchange Commission registration fee and the National Association of Securities Dealers, Inc. filing fee. The following expenses will be borne solely by the Registrant.

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Securities and Exchange Commission Registration Fees..... $39,600
National Association of Securities Dealers, Inc. Filing Fee......  95,000
Blue Sky Fees and Expenses.....................................  10,000
Printing and Engraving Expenses................................       *
Legal Fees and Expenses........................................       *
Accounting Fees and Expenses...................................       *
Transfer Agent and Registrar Fees..............................       *
Miscellaneous..................................................       *
  Total..................................................... $
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* To be supplied by amendment.

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law permits a corporation to include in its charter documents, and in agreements between the corporation and its directors and officers, provisions expanding the scope of indemnification beyond that specifically provided by the current law.

The Registrant's certificate of incorporation provides for the indemnification of directors to the fullest extent permissible under Delaware law. The Registrant's bylaws provide for the indemnification to the fullest extent as required or permitted by Delaware law of officers and directors acting on behalf of the Registrant with respect to any criminal action or proceeding.

We have entered into an indemnification agreement with each of our directors which requires us, among other things, to indemnify them against certain liabilities which may arise by reason of his status or service as a director (other than liabilities arising from willful misconduct of a culpable nature). We also intend to maintain director and officer liability insurance, if available on reasonable terms.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the Registrant pursuant to the foregoing provisions, the Registrant has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 15. Recent Sales of Unregistered Securities.

Since incorporation, the Registrant has issued the following securities that were not registered under the Securities Act as summarized below:

None of these transactions involved any underwriters, underwriting discounts or commissions, or any public offering, and the Registrant believes that each transaction was exempt from the registration requirements of the Securities Act by virtue of Section 4(2) thereof, Rule 506 of Regulation D promulgated thereunder or Rule 701 promulgated under from 3(b) of the Securities Act pursuant to compensatory benefit plans and contracts relating to compensation as provided under such Rule 701. The recipients of securities in each such transaction represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the stock certificates and instruments issued in such transactions. All recipients either received adequate information or had access, through their employment or other relationships with the Registrant, to such information about the Registrant. For additional information regarding these equity investment transactions, see the section entitled "Transactions with Related Parties" in the Prospectus.

(a) Issuances of Capital Stock.

1. From inception until December 28, 1999, the Registrant issued and sold in aggregate of 21,800,000 shares of common stock to individuals who founded the Registrant.

2. On March 31, 2000, the Registrant issued and sold an aggregate of 500,000 shares of its Series A preferred stock to a group of private investors for an aggregate purchase price of $5,000,000.

3. Between August 30, 2000 and December 8, 2000, the Registrant issued and sold an aggregate of 3,800,000 shares of its Series B preferred stock to a group of private investors for an aggregate purchase price of $95,000,000.

4. On August 24, 2000, the Registrant issued 1,150,000 shares of its common stock and paid $7,500,000 to IP Fibre Devices Ltd. to purchase 51% of IPG Laser GmbH.

5. On October 4, 2000, we exercised our rights under a Contribution and Exchange Agreement, dated August 24, 2000, between us and Dr. Valentin P. Gapontsev, our Chairman of the Board of Directors and Chief Executive Officer, under which we received the remaining 46% of the total issued and

outstanding interest in IPG Laser GmbH from Dr. Valentin P. Gapontsev in exchange for an aggregate of 1,403,000 shares of our common stock.

(b) Certain Grants of Warrants to Purchase Common Stock

1. Between August 30 and December 8, 2000, the Registrant granted warrants to purchase an aggregate of shares of its common stock to a group of private investors in connection with the sale of the Registrant's Series B preferred stock, assuming an offering price of .

(c) Certain Grants and Exercises of Stock Options and Warrants 1. From incorporation through November 30, 2000, the Registrant granted stock options to purchase 4,061,300 shares of common stock at exercise prices ranging from $1.00 to $7.50 per share to employees, consultants and directors pursuant to its 2000 stock incentive plan. 330,934 of such options have been exercised through November 30, 2000.

2. On February 3, 2000, the Registrant granted stock options to purchase 350,000 shares of common stock outside of its 2000 stock incentive plan at an exercise price of $1.00 per share to members of its National Advisory Board, and 250,000 of such options were exercised on March 17, 2000. In November 2000, the Registrant granted stock options to purchase 25,000 shares outside of its 2000 stock incentive plan at an exercise price of $7.50 per share to a new member of the National Advisory Board.

Item 16. Exhibits and Financial Statement Schedules.

Exhibit Number Description

1.1*	Form of Underwriting Agreement
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as amended
3.2	Bylaws of the Registrant, as amended
4.1*	Specimen certificate representing the common stock
4.2	Form of Warrant to Purchase Common Stock of the Registrant
4.3	Series A Preferred Stockholders Agreement, dated as of March 31, 2000, among the Registrant and the owners of Series A Preferred Stock of the Company listed on Schedule I attached thereto
4.4	Registration Rights Agreement, dated as of August 30, 2000, by and between the Registrant and the Investors named therein
5.1*	Opinion of Winston & Strawn
10.1	2000 Stock Incentive Plan, as amended
10.2	$6,500,000.00 Construction Loan Furnished by Family Bank, FSB to the Registrant, Guaranteed by IP Fibre Devices Ltd. and Dr. Valentin P. Gapontsev, dated April 28, 2000
10.3	Assignment, Research and Development Agreement, dated as of August, 30, 2000, by and among the Registrant, IPG Laser GmbH, IPG Fibertech S.r.l and NTO IRE-POLUS
10.4	Purchase and Sales Agreement, dated October 6, 1999, by and between the Registrant and Daniel Prouty and Melvin Glickman as trustees for Elmar Realty Trust
10.5	Employment Agreement, entered into as of June 19, 2000, by and between the Registrant and John Geagea
10.6	Employment Agreement, entered into as of August 9, 2000, by and between the Registrant and Hon. John H. Dalton
10.7*	Employment Contract between IPG Laser and Its Managing Director, Dr. Valentin P. Gapontsev, dated August 25, 1995
10.8	Form of Indemnification Agreement by and between the Registrant and

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        its Directors
10.9    Design and Building Agreement, dated March 10, 2000, by and between
        the Registrant and AHO Construction, Inc.
10.10*  IPG Photonics Corporation Purchase and Sale Agreement No. 1/99 dated
        May 14, 1999, by the Registrant and SDL Incorporated, as amended
21.1    List of Subsidiaries
23.1*   Consent of Winston & Strawn (See Exhibit 5.1)
27.1    Financial Data Schedule
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* To be filed by amendment.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes to provide to the Underwriters at the closing specified in the Underwriting Agreement certificates in such denominations and registered in such names as required by the Underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification by the Registrant for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described under Item 14 of this Registration Statement or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act, and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered hereunder, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of Prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective; and (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of Prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial bona fide offering thereof.

Signatures

Pursuant to the requirements of the Securities Act of 1933 (the "Securities Act"), the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Sturbridge, Massachusetts on December 8, 2000.

IPG Photonics Corporation /s/ Dr. Valentin P. Gapontsev By: _____ Name: Dr. Valentin P. Gapontsev Title: Chairman of the Board of Directors and Chief Executive Officer Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in their capacities on the dates indicated below.

Signature Title Date

/s/ Dr. Valentin P. Gapontsev _____ Dr. Valentin P. Gapontsev	Chairman of the Board of Directors and Chief Executive Officer	December 8, 2000

/s/ Hon. John H. Dalton President and Director December 8, 2000 Hon. John H. Dalton /s/ Dr. Eugene Shcherbakov Director December 8, 2000 Dr. Eugene Shcherbakov

/s/ Timothy P.V. Mammen _____ Timothy P.V. Mammen	Chief Financial Officer and Vice President	December 8, 2000
/s/ Dr. Denis Gapontsev _____ Dr. Denis Gapontsev	Vice President of Research and Development and Director	December 8, 2000

/s/ Robert A. Blair Vice Chairman of the Board December 8, 2000 _____ of Directors Robert A. Blair /s/ Michael C. Child Director December 8, 2000 Michael C. Child /s/ Dr. William F. Krupke Director December 8, 2000 Dr. William F. Krupke Index to Exhibits Exhibit Number Description

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