

SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

FORM S-3
 REGISTRATION STATEMENT
 UNDER
 THE SECURITIES ACT OF 1933

APA OPTICS, INC.
 (Exact Name of registrant as specified in its charter)

MINNESOTA	3827	41-1347235
(State or other jurisdiction of incorporation)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

2950 N.E. 84TH LANE, BLAINE, MINNESOTA 55449 (763) 784-4995
 (Address, including zip code and telephone number, including area code of registrant's principal executive offices)

ANIL K. JAIN, CHIEF EXECUTIVE OFFICER
 APA OPTICS, INC.
 2950 N.E. 84TH LANE
 BLAINE, MINNESOTA 55449
 TELEPHONE: (763) 784-4995 TELEFAX: (763) 784-2038
 (Name, address, including zip code, and telephone number, including area code, of agent for service)

COPIES TO:
 JANNA R. SEVERANCE, ESQ.
 MOSS & BARNETT, A PROFESSIONAL ASSOCIATION
 4800 WELLS FARGO CENTER, 90 SOUTH SEVENTH STREET
 MINNEAPOLIS, MINNESOTA 55402-4129
 TELEPHONE: (612) 347-0367

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC:
 From time to time, commencing as soon as practicable after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: []
 If any of the securities being registered on this Form are being offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: [X]
 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 statement 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 statement 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. []

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CALCULATION OF REGISTRATION FEE

<S>	<C>	<C>	<C>	<C>
TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED (1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE (2)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE (2)	AMOUNT OF REGISTRATION FEE
Common stock, \$.01 par value	\$ 84,083	17.875	\$1,502,984	\$ 397

</TABLE>

(1) Represents shares to be sold by the selling shareholder named herein that may be acquired upon the exercise of warrants issued to the selling shareholder for services as placement agent for the Company's common stock. Also includes an indeterminate number of shares that the selling shareholder may acquire as a result of a stock split, stock dividend or

similar transaction involving the common stock pursuant to the anti-dilution provisions of the warrants.

- (2) Calculated solely for the purpose of determining the registration fee pursuant to Rule 457(c) based upon the average of the high and low prices per share of the Company's common stock on the Nasdaq National Market on August 16, 2000.

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

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ii

84,083 SHARES
APA OPTICS, INC.

COMMON STOCK

This prospectus covers up to 84,083 shares of the common stock, par value \$.01 per share, of APA Optics, Inc., a Minnesota corporation, which may be sold from time to time by the shareholder named in this prospectus. Effective August 16, 2000, our common stock is traded on the Nasdaq National Market under the symbol APAT. On August 16, 2000, the closing sale price for the common stock as reported on the Nasdaq National Market was \$17.25 per share.

The shares of common stock offered by this prospectus may be sold by the selling shareholder from time to time in transactions on the open market or in negotiated transactions, in each case at prices satisfactory to them.

SEE "RISK FACTORS" BEGINNING AT PAGE 6 TO READ ABOUT FACTORS YOU SHOULD CONSIDER BEFORE BUYING SHARES OF OUR COMMON STOCK.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

No person has been authorized by us to give any information or to make any representations about the offering of common stock made by this prospectus other than the information and representations contained in this prospectus. Accordingly, you should not rely on information outside of this prospectus. This prospectus is not an offer to sell or buy any security other than the common stock offered by this prospectus; it is not an offer to sell or buy securities in any jurisdiction in which such offer is not qualified; and it is not an offer to buy or sell securities to any person to whom such offer would be unlawful. The information in this prospectus is current as of the date of this prospectus. Your receipt of this prospectus does not mean that there has been no change in the affairs of APA Optics, Inc. since the date of this prospectus or that the documents which are incorporated by reference in this prospectus are correct as of any date after the date of such documents.

THE DATE OF THIS PROSPECTUS IS _____, 2000.

iii

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THESE SECURITIES MAY NOT BE SOLD 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.

WHERE YOU CAN FIND MORE INFORMATION

APA Optics is subject to the informational requirements of the Securities Exchange Act of 1934, and files reports, proxy statements and other information with the Securities and Exchange Commission. These reports, proxy statements and other information can be inspected and copies can be made at:

- o the public reference facilities maintained by the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549
- o the regional offices of the Commission located at 500 West Madison Street, Chicago, Illinois 60601 and at 7 World Trade Center, New York, New York 10048
- o the offices of Nasdaq Operations, 1735 K Street, N.W., Washington, D.C.

These materials may also be accessed electronically by means of the Securities and Exchange Commission's home page on the Internet (<http://www.sec.gov>).

This prospectus is a part of a registration statement on Form S-3 that APA Optics has filed with the Securities and Exchange Commission. You may obtain copies of the registration statement from the Commission at the addresses in the preceding paragraph. This prospectus does not contain all of the information set forth in the registration statement and its exhibits. The registration statement provides further information about us and the shares. While we believe this prospectus provides the material information regarding the contracts and documents described in it, the statements contained in this prospectus about the contents of any contract or any other documents are not necessarily complete and, in each such instance, you should inspect the copy of such contract or document filed as an exhibit to the registration statement.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The following documents filed by APA Optics with the Commission pursuant to the Securities Exchange Act of 1934 (File No. 0-16106) are incorporated by reference in this prospectus, except as otherwise superseded or modified herein:

Our annual report on Form 10-K for the fiscal year ended March 31, 2000.

Our quarterly report on Form 10-Q for the fiscal quarter ended June 30, 2000.

Our registration statement on Form 8-A, dated July 28, 1987, registering our common stock under Section 12(g) of the Securities Exchange Act of 1934.

Our proxy statement on Schedule 14A for our annual shareholders meeting for the fiscal year ended March 31, 2000.

All other reports and documents filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act since March 31, 2000 and prior to the termination of the offering of the common stock, are also deemed to be incorporated by reference into this prospectus.

Any statement in any document incorporated or deemed to be incorporated by reference is modified or superseded to the extent that a statement in this prospectus or in any other subsequently filed document incorporated by reference modifies or supersedes such statement.

We will furnish you, without charge, with a copy of any or all of the documents referred to above (other than exhibits to such documents). Requests for copies should be directed, orally or in writing, to:

Anil K. Jain, Chief Executive Officer
APA Optics, Inc.
2950 N.E. 84th Lane
Blaine, MN 55434
Telephone: (763) 784-4995

TABLE OF CONTENTS

	Page
PROSPECTUS SUMMARY.....	1
THE COMPANY.....	2
RISK FACTORS.....	5
FORWARD-LOOKING STATEMENTS.....	15
USE OF PROCEEDS.....	16
PRICE RANGE OF COMMON STOCK.....	16
SELLING SHAREHOLDER.....	16
PLAN OF DISTRIBUTION.....	17
INTERESTS OF NAMED EXPERTS AND COUNSEL.....	18
MATERIAL CHANGES.....	18
DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION.....	19
ANTITAKEOVER STATUTE.....	19

PROSPECTUS SUMMARY

THE FOLLOWING SUMMARY CONTAINS INFORMATION ABOUT APA OPTICS, INC., SOMETIMES REFERRED TO AS "APA OPTICS" OR THE "COMPANY." IT MAY NOT CONTAIN ALL THE INFORMATION THAT MAY BE IMPORTANT TO YOU. YOU SHOULD READ THE ENTIRE PROSPECTUS, THE DOCUMENTS WHICH ARE INCORPORATED BY REFERENCE IN THE PROSPECTUS, INCLUDING THE FINANCIAL DATA AND RELATED NOTES, AND THE OTHER INFORMATION CONTAINED IN THE FORM S-3 REGISTRATION STATEMENT BEFORE MAKING AN INVESTMENT DECISION. THE REFERENCES TO "WE," "US," AND "OUR" MEAN APA OPTICS, EXCEPT WHERE IT IS CLEAR BY THE CONTEXT THAT THE REFERENCE IS TO SOMEONE ELSE.

THE COMPANY

APA Optics is engaged in the business of designing, manufacturing, and marketing optical components and various optoelectronic products. Currently, we are focused on two product areas: dense wavelength division multiplexer (DWDM) components for fiber optic communications and gallium nitride-based ultraviolet (UV) detectors (both components and integrated detector/electronic/display packages). We selected these areas of concentration because we believe they have significant potential markets and because we have significant expertise and/or patent positions relating to them. In fiscal 1999 we significantly reduced our R&D contracts (historically a significant source of revenue for us) to concentrate on development and production of our own proprietary products. This shift has significantly reduced our revenues and increased our losses, which will continue until we realize significant revenues from these products. Until such time, we will need additional funding to sustain our operations and to acquire additional equipment and additional personnel to meet our objectives. If we are successful in manufacturing and marketing our products, we expect to significantly increase revenues and achieve profitability.

APA Optics was incorporated in Minnesota in March 1979 and became a publicly owned company in 1986. Our principal offices are located at 2950 N.E. 84th Lane, Blaine, Minnesota 55434, and our telephone number is (763) 784-4995.

RISK FACTORS

An investment in our common stock involves a high degree of risk and is not appropriate for persons who cannot afford to lose their entire investment. See "Risk Factors."

THE OFFERING

The shares of common stock which are offered by this prospectus are shares which will be issued to the selling shareholder named in this prospectus if it chooses to exercise warrants for purchase of an aggregate of 84,083 shares of common stock. The selling shareholder acquired the warrants in June 2000 for services as placement agent for our common stock. The selling shareholder may exercise the warrants, at its option, at a price of \$17.84 per share (subject to adjustments under certain circumstances) until close of business on June 23, 2003. Certain information about our common stock and this offering is summarized below.

Common stock to be issued upon
exercise of warrants.....84,083.shares

Common stock to be outstanding
exercise of warrants (1)(2).....11,977,943 shares

Use of proceeds.....We will receive approximately \$1.5 million if the warrants are exercised in full. These funds will be used for general corporate purposes. We will not receive any proceeds from the sale of common stock by the selling shareholder.

Nasdaq symbol.....APAT

Transfer Agent and Registrar.....Wells.Fargo Shareowner Services,
South St. Paul, Minnesota

- (1) Assumes no issuance of common stock other than in connection with this offering and no exercise of any warrants or options for common stock or conversion of any securities convertible to common stock. As of August 15, 2000 we had reserved for issuance:
- (a) 374,533 shares for various warrants, not including additional warrants in an amount not currently calculable which may be issued in connection with certain bond financing; and
 - (b) 1,336,338 shares under employee benefit plans, a directors option plan, and other options.

SUMMARY FINANCIAL INFORMATION

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	Quarter Ended	Year Ended March 31	
	June 30, 2000	2000	1999
	-----	-----	-----
Statement of operations data:			
	<C>	<C>	<C>
Net revenues	\$ 51,517	\$ 420,809	\$ 722,030
Net income (loss)	(909,675)	(3,796,296)	(2,513,798)
Net income (loss) per share (basic)	(.10)	(.43)	(.30)
Net income (loss) per share (diluted)	(.10)	(.43)	(.30)
			March 31

Balance sheet data(1):	June 30, 2000	2000	1999
	-----	-----	-----
Working capital	\$20,223,050	\$6,116,616	\$2,864,549
Total assets	23,677,084	9,610,391	6,804,976
Shareholders' equity	20,506,590	6,306,049	3,389,295

</TABLE>

- (1) Subsequent to March 31, 2000, we have sold an aggregate of 2,845,868 shares of our common stock and received gross proceeds of approximately \$41.5 million.

THE COMPANY

Since the founding of APA Optics, Inc. in 1979, we have focused on leading edge research in sophisticated optoelectronics and optical systems, with the primary goal of developing advanced products for subsequent marketing and fabrication. We currently manufacture dense wavelength division multiplexer (DWDM) optical components, offer a range of gallium nitride-based devices and services, and market custom optics products.

For the last several years our goal has been to manufacture and market

products and components based on our technology developments. We have focused our efforts on DWDM components for fiber optic communications and gallium nitride-based ultraviolet (UV) detectors (both components and

2

integrated detector/electronic/display packages) because we believe that these two product areas have significant potential markets and because we have expertise and/or patent positions relevant to them.. If we are successful in manufacturing and marketing these products, we expect to significantly increase our revenues and achieve profitability.

PRODUCTS

We currently offer the products described below:

- o OPTICAL LENS SYSTEMS. We design and build multi-element lens systems and components, including mounting structures, for precision quality optical needs in many applications, including laser-based systems, imaging systems, inspection systems, display systems, display optics, focusing optics for ultraviolet fire alarms, collimation and focusing optics for fiber optics systems.
- o OPTICAL THIN FILM COATINGS. We custom design, develop, and fabricate optical thin film coatings for optical components of lasers, laser systems, optical instruments, and optical devices. Our antireflective coatings are deposited onto Company-fabricated lens components. We also use our thin film coating facility to design, develop and fabricate coating for lens components supplied by customers.

Our research and development efforts are currently focused on the optoelectronic products described below. Optoelectronic devices are vital components of communication systems and optical instruments.

- o DENSE WAVELENGTH DIVISION MULTIPLEXER (DWDM). We recently demonstrated the feasibility of a DWDM capable of transmitting several channels through a single optical fiber for communication applications. We developed the DWDM based on our development of optical modulator (single channel) technology during the early 1990s for fiber optic communication. These modulators have the capability of direct high speed (several billion bits per second) data loading and unloading on laser beams going through optical fibers, either for short distance or long distance. The DWDM, a small part of the modulator, utilizes high frequency holographic gratings. Our DWDM enables transmission of data on several different channels within a single fiber (a simple analogy is the expansion of a single lane highway to a multi-lane throughway) and, as a result, provides higher speed, increased and regulated data handling capabilities as compared to a single channel modulator. We are currently performing environmental packaging of the DWDM. We filed the first patent related to the DWDM Optical Modulator in June 1994, which was awarded on September 12, 1995. Since then, we have filed for six additional patents related to DWD Multiplexer/Demultiplexer devices. We were awarded two of these patents in March 1997 and February 1998. The other four applications are still pending.
- o UV DETECTOR. The UV Detector is a high response solid state detector based on single-crystal gallium nitride (GaN). The GaN detector is expected to have applications in spectrometry, solar radiation measurement, excimer-laser measurement and calibration, biomedical instrumentation, and flame detection and monitoring. The detector is visible blind, which allows detection of UV radiation in the presence of room lights without a filter. We believe the GaN detector has advantages over photomultiplier tubes because of its ruggedness and chemical inertness, which suit it for application in high-vibration and harsh environments as well as high-temperature operation. We have been awarded several patents in GaN related technologies.

3

OTHER PRODUCTS

We are in the process of introducing several other products by packaging our UV detectors with electronics and displays for many applications. Among these are a solar sensing watch to detect potential cancer causing UV radiation for consumer applications, UV radiation based flame sensors for industrial applications, and UV radiation meters for laboratory and industrial

applications. All of these products have significant similarities and, therefore, do not require significant financial resources for development.

MARKETING AND DISTRIBUTION

We delivered a limited number of alpha units of the DWDM to customers during fiscal 1999 and 2000 and we have sold several UV detectors to more than 30 customers and a few detector/electronics packages. We aggressively market both products by advertising in relevant professional magazines, showcasing them in trade shows, direct mailing, personal visits, and by use of distributors in various countries (including Japan, Germany, Italy and France). We also maintain product information on our web page. We have a business manager who focuses on sales of DWDM, along with two applications engineers, and two persons who work on marketing and sales of GaN-based products.

SOURCE OF RAW MATERIALS

Optical glass and optical chips are two principal materials used in our operations. optical glass is commercially available through several distributors. We currently use at least two vendors for optical chips and continuously look for additional vendors for these parts. Certain chemicals and other materials used by us are routinely available from several sources.

ENVIRONMENTAL COMPLIANCE

Because we handle a number of chemicals in our operations, we must comply with federal, state and local laws and regulations regarding the handling and disposal of such chemicals. The cost of such compliance is not material.

MAJOR CUSTOMERS

In prior years, we provided research and development services under contracts with various governmental agencies. Currently, we have no material contracts with any such agencies. Revenues from the following unrelated customers constituted more than ten percent of our total operating revenues in fiscal years 2000, 1999 and 1998:

Name	Year Ended March 31		
	2000	1999	1998
Government Agencies*	38%	67%	89%

* REPRESENTS SERVICES TO SEVERAL OPERATING AGENCIES OF THE U.S. GOVERNMENT, AS FOLLOWS:

Name	2000	1999	1998
Air Force	--	15%	18%
Army	35%	--	22
Navy	3	12	34
ARPA	--	40	15
Total	38%	67%	89%

BACKLOG

Our backlog of uncompleted contracts at March 31, 2000, was approximately \$28,400, as compared to \$189,000 at March 31, 1999, and \$1,300,000 at March 31, 1998. Of the current year's backlog, all contracts will be completed within the next year. The reduced backlog is a direct result of our shift from contract R&D to product development and production.

COMPETITION

Competition in the optoelectronics and optics fabrication businesses is significant. Many of the companies engaged in these businesses are well-financed and have significantly greater research, development, production, and marketing resources than we do. However, we believe that we have a competitive advantage due to our patents and the uniqueness of our devices. In particular, we believe our DWDM is the most efficient (lowest insertion loss) and compact device currently available.

RESEARCH AND DEVELOPMENT

During the fiscal years ended March 31, 2000, 1999, and 1998, we spent approximately \$327,000, \$382,000, and \$339,000, respectively, on research and development, all of which was related to the DWDM, UV detector and related

products. In addition, in each of those years, we spent approximately \$978,000, \$837,000, and \$1,431,000, respectively, on research activities sponsored by customers. As we shift our focus to development of our proprietary products, we expect that customer-sponsored R&D will continue to decline.

EMPLOYEES

As of August 15, 2000, we employed 43 full-time employees (including executive officers).

RISK FACTORS

BEFORE YOU INVEST IN THE COMMON STOCK YOU SHOULD CONSIDER THAT THE VALUE OF THE SHARES IN THE SECONDARY MARKET IS SUBJECT TO VARIOUS RISKS, INCLUDING THOSE DESCRIBED BELOW. IF ANY OF THE FOLLOWING RISKS ACTUALLY OCCUR, OUR BUSINESS, RESULTS OF OPERATIONS OR CASH FLOWS COULD BE ADVERSELY AFFECTED. IN THOSE CASES, THE TRADING PRICE OF OUR COMMON STOCK COULD DECLINE, AND YOU MAY LOSE ALL OR PART OF YOUR INVESTMENT. THESE RISKS SHOULD BE EVALUATED TOGETHER WITH ALL OF THE OTHER INFORMATION IN THIS PROSPECTUS BEFORE YOU DECIDE TO PURCHASE ANY OF THE SHARES WHICH ARE OFFERED. SPECIFIC RISK FACTORS WHICH YOU SHOULD CONSIDER INCLUDE THE FOLLOWING:

WE HAVE LIMITED EXPERIENCE IN MANUFACTURING. Although we have been involved in the manufacturing of optical components for several years, and have manufactured limited quantities of UV detectors and alpha DWDMs, we have not engaged in high volume manufacturing of these products. We may be unable to manufacture products that satisfy the volume and quality requirements of our customers, and, as a result, we may not achieve significant revenues or profitability.

WE MAY NOT BE ABLE TO REDUCE OUR MANUFACTURING COSTS SUFFICIENTLY OR PLAN OUR MANUFACTURING EXPANSION ACCURATELY. We expect the price of our existing products to decline due to various factors, such as: increased competition, including competition from companies with lower labor and production costs;

5

a limited number of potential customers with significant bargaining leverage; introduction of new products by competitors; and greater economies of scale for higher volume manufacturers. To increase our revenues, we must increase our unit volumes and our manufacturing capacity. Adding capacity increases our fixed costs and the levels of unit shipments we must produce to achieve positive gross margins. As a result, if we are unable to increase our revenues or continuously reduce our manufacturing costs, our gross margins will not improve and we will continue to incur losses.

We are increasing our manufacturing capacity at our existing facilities in Aberdeen, South Dakota. Developing manufacturing capabilities involves significant risks which could materially adversely affect our gross margins and revenues, including:

- o Our inability to qualify a new manufacturing line for all of our customers;
- o unanticipated cost increases;
- o unavailability or late delivery of equipment;
- o unforeseen environmental or engineering problems; and
- o personnel recruitment delays.

Expanding our manufacturing capacity requires substantial time to build out and equip facilities and train personnel. If we receive orders substantially in excess of our planned capacity, we might not be able to fulfill them quickly enough to meet customer requirements. Our inability to deliver products timely could enable competitors to win business from our customers.

WE MAY NOT BE ABLE TO EFFECTIVELY INCREASE PRODUCTION AND MAINTAIN ACCEPTABLE MANUFACTURING YIELDS, RESULTING IN DELAY OF PRODUCT SHIPMENTS AND IMPAIRMENT OF OUR GROSS MARGINS. Manufacturing our products is highly complex and labor intensive. As we rapidly increase production and hire more people, our manufacturing yield, which is the percentage of our products which meet customer specifications, could decline, resulting in product shipment delays, possible lost revenue opportunities, higher customer returns, and impaired gross margins. Some of our manufacturing lines have experienced lower than expected yields, which could continue in the future. Rapid increases in production levels to meet demand may also result in higher overtime costs and other expenses.

WE HAVE HAD LIMITED SALES AND EXPECT LOSSES. To date, we have had only limited sales of UV detectors and DWDMs. As of June 30, 2000, we had an accumulated deficit of \$11,102,057. We expect operating losses to continue until sales of these products reach a level sufficient to cover operating costs. We

may never generate sales at the required levels or become profitable.

Our ability to achieve profitability will depend on our ability to develop and bring new proprietary products to market. Our ability to become profitable will also depend upon a variety of other factors, including the following:

- o The price, volume and timing of sales of products;
- o Variations in gross margins of our products, which may be affected by sales mix and competitive pricing pressures;
- o Changes in the level of our research and development; and

6

- o Acquisitions of products, technology or companies.

Our long-term success will also be affected by expenses, difficulties and delays frequently encountered in developing and commercializing new products, competition, and the regulatory environment in which we operate. We cannot be certain that we will ever achieve significant revenues or profitable operations.

WE MUST CONTINUE TO FUND PRODUCT DEVELOPMENT. The continued existence and the growth and profitability of the Company depend upon the success of our product manufacturing and marketing efforts. In order for new products to be successfully marketed, they must satisfy the needs of potential customers by performing under the conditions in which such customers intend to use the products. We must continue development of these products and their packaging to ensure that these products will meet such requirements. However, our products may not perform as anticipated or as needed by customers.

OUR BUSINESS WILL SUFFER IF WE FAIL TO OBTAIN ADEQUATE FUNDING IN A TIMELY MANNER. We expect that we will need substantial additional funding. Our business, results of operations and cash flows will be adversely affected if we fail to obtain adequate funding in a timely manner. Our funding requirements will depend on many factors, including:

- o The progress of our research and development programs;
- o Revenue growth, if any;
- o The amount of cash generated, if any, by our operations;
- o The costs involved in preparing, filing, prosecuting, maintaining, enforcing and defending patent claims and other intellectual property rights;
- o Competing technological and market developments; and
- o The need for additional manufacturing facilities to accommodate growth.

We anticipate that our existing capital resources as of the date of this prospectus will be adequate to fund operations and capital expenditures at least through March 31, 2001. However, if we experience unanticipated cash requirements during this period, we could require additional funds much sooner. We may receive funds from the sale of equity securities, or the exercise of outstanding warrants and options to acquire common stock. However, we cannot assure you that any of those fundings will occur, or if they occur, that they will be on terms favorable to us. Also, the dilutive effect of those fundings could adversely affect our results per share.

ASSERTING AND DEFENDING INTELLECTUAL PROPERTY RIGHTS WILL HARM OUR RESULTS OF OPERATIONS REGARDLESS OF SUCCESS. Our business will be harmed if competitors develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets, if our trade secrets are disclosed or if we cannot effectively protect our rights to unpatented trade secrets.

WE ACTIVELY SEEK PATENT PROTECTION FOR OUR PROPRIETARY PRODUCTS AND TECHNOLOGIES. We have a number of United States patents and also have licenses to or assignments of numerous issued United States patents. However, litigation may be necessary to protect our patent position, and we cannot be certain that we will have the required resources to pursue the necessary litigation or otherwise to protect our patent rights. Our efforts to protect our patents may fail. In addition to pursuing patent protection in

7

appropriate cases, we also rely on trade secret protection for unpatented proprietary technology. However, trade secrets are difficult to protect.

CLAIMS MAY BE BROUGHT AGAINST US IN THE FUTURE BASED ON PATENTS HELD BY OTHERS. These persons could bring legal actions against us claiming damages and seeking to enjoin manufacturing and marketing of the affected product. If any of these actions are successful, in addition to any potential liability for damages, we could be required to obtain a license in order to continue to manufacture or market the affected product. We cannot assure you whether we would prevail in any of these actions or that we could obtain any licenses required under any of these patents on acceptable terms, if at all. We know of no pending patent infringement suits, discussions regarding possible patent infringements or threats of patent infringement litigation either related to:

- o patents held by us; or
- o our products or proposed products.

There could be significant litigation in our industry regarding patent and other intellectual property rights. If we become involved in any litigation, it could consume a substantial portion of our resources, regardless of the outcome of the litigation.

WE EXPERIENCE STRONG COMPETITION AND CHANGES IN TECHNOLOGY COULD RESULT IN MORE COMPETITION. The business in which we engage is highly competitive. Many of our competitors include large, well-financed and established companies who have far greater marketing, product development, and financial resources than we do.

We may not be able to successfully anticipate changes in technology, industry standards, customer requirements and product offerings, yet our ability to develop and introduce new and enhanced products will impact our position as a leader in the deployment of high-capacity solutions. The accelerating pace of deregulation in the telecommunications industry will likely intensify the competition for improved technology. There has been an increase in the funding of new companies intending to develop new products for the rapidly evolving telecom industry. These companies have time-to-market advantages due to the narrow and exclusive focus of their efforts. New companies may provide additional competition for our existing product lines as well as potential future products. The introduction of new products embodying new technologies or the emergence of new industry standards could render our existing products uncompetitive from a pricing standpoint, obsolete or unmarketable. Any of these outcomes would have a material adverse effect on our business, financial condition and results of operations.

Because many of our competitors have greater financial and other resources than we do, they may be able to more quickly:

- o respond to new technologies or technical standards;
- o react to changing customer requirements and expectations;
- o manufacture, market and sell current products;
- o develop new products or technologies; and
- o deliver competitive products at lower prices.

8

As a result of these factors, our customers could decide to purchase products from our competitors and reduce their purchases from us.

Our customers may also develop their own internal sources of supply in competition with us or may acquire our suppliers and potential suppliers. For example, our customers and competitors may buy suppliers from whom we purchase or could purchase raw materials and components necessary for our business, thus limiting our supply options and possibly resulting in delays, price increases, and inferior quality (all of which would adversely affect our business).

WE CURRENTLY HAVE LIMITED MARKETING EXPERTISE AND PERSONNEL AND EXPECT TO INCUR SUBSTANTIAL MARKETING COSTS. Our growth is dependent upon our ability to implement an aggressive, strong, and consistent marketing program for the Company's new products. We currently have a business manager who focuses on sales of DWDM, acting with two applications engineers, and two employees who work on marketing and sales of GaN-based products. In addition, we currently market our products through independent distributors in several foreign countries. We believe that it is necessary to significantly expand our marketing efforts to market our new products successfully. Accordingly, we expect to incur substantial costs in connection with marketing and sales efforts. However, we cannot be sure that our efforts will result in significantly greater product recognition or market penetration, or significantly increased levels of

revenues.

ACCEPTANCE OF OUR NEW PRODUCTS IS UNCERTAIN. Although we have received several indications of interest from potential customers, we have not received any significant production orders. Because our products are relatively new in the market and are still being evaluated by potential customers, we cannot predict accurately the volume or timing of any orders.

WE MAY NOT BE ABLE TO SUCCESSFULLY COMPLETE DEVELOPMENT AND ACHIEVE COMMERCIAL ACCEPTANCE OF OUR NEW PRODUCTS. To date, we have delivered evaluation units of our DWDM and UV detector products, and have sold a limited number of our UV detector products. We have not yet widely distributed our products on a commercial basis. The maturing process from laboratory prototype to commercial acceptance involves a number of steps, including:

- o successful completion of product development;
- o validation of manufacturing methods;
- o extensive quality assurance and reliability testing; and
- o identification and qualification of component suppliers.

Each of these steps in turn presents serious risks of failure, rework or delay, any one of which could materially and adversely affect the speed and scope of product introduction and marketplace acceptance of the products. In addition, unexpected intellectual property disputes, failure of critical design elements, and a host of other execution risks may delay or even prevent the introduction of these products. We have not yet demonstrated commercial acceptance of these products and commercialization may require substantial sales and marketing efforts over lengthy sales cycles. Our best efforts may not be successful in attaining significant commercial acceptance and purchase of our products.

PRODUCT PERFORMANCE PROBLEMS COULD LIMIT OUR SALES PROSPECTS. The production of new fiberoptic systems with high technology content involves occasional problems as the technology and manufacturing methods mature. If significant reliability, quality or monitoring problems develop, a number of material adverse effects could result, including:

9

- o manufacturing rework costs;
- o high service and warranty expense;
- o high levels of product returns;
- o delays in collecting accounts receivable;
- o reduced orders from existing customers; and
- o declining interest from potential customers.

Although we maintain accruals for product warranties, actual costs could exceed these amounts.

IF OUR NEW PRODUCT INTRODUCTIONS ARE DELAYED, OR IF OUR NEW PRODUCTS HAVE DEFECTS, OUR REVENUES WOULD BE HARMED AND OUR COSTS COULD INCREASE. If we do not introduce new products in a timely manner, we will not obtain incremental revenues from these products or be able to replace more mature products with declining revenues or gross margins. Customers could decide to purchase components from our competitors, resulting in lost revenue over a longer term. We could also incur unanticipated costs if new product introductions are delayed or we need to fix defective new products.

IF WE ARE UNABLE TO DEVELOP NEW PRODUCTS AND PRODUCT ENHANCEMENTS THAT ACHIEVE MARKET ACCEPTANCE, SALES OF OUR PRODUCTS COULD DECLINE, WHICH WOULD HARM OUR OPERATING RESULTS. The communications industry is characterized by rapid technological change, frequent new product introductions, changes in customer requirements and evolving industry standards. As a result, our products could quickly become obsolete as new technologies are introduced and incorporated into new and improved products. Our future success depends on our ability to anticipate market needs and to develop products that address those needs. Our failure to predict market needs accurately or to develop new products or product enhancements in a timely manner will harm market acceptance and sales of our products. In this regard, we are currently developing bandwidth creation products, as well as bandwidth management products. If the development of these products or any other future products takes longer than we anticipate, or if we are unable to develop and introduce these products to market, our revenues could suffer and we may not gain market share. Even if we are able to develop and commercially introduce these new products, the new products may not achieve widespread market acceptance.

WE DEPEND ON THE CONTINUED GROWTH AND SUCCESS OF THE COMMUNICATION INDUSTRY, WHICH IS EXPERIENCING RAPID CONSOLIDATION AND REALIGNMENT AND MAY NOT CONTINUE TO DEMAND FIBER OPTIC PRODUCTS, THEREBY REDUCING DEMAND FOR OUR PRODUCTS AND HARMING OUR OPERATING RESULTS. We depend on the continued growth and success of the communications industry, including the continued growth of the Internet as a widely-used medium for commerce and communication and the continuing demand for increased bandwidth over communications networks. Trends that are currently driving growth in the communications industry may not continue in a manner favorable to us and technological or other developments in the communications industry may not favor growth in the markets served by our products. Furthermore, the rate at which communication service providers and other fiber optic network users have built new fiber optic networks or installed new systems in their existing fiber optic networks has fluctuated in the past and these fluctuations may continue in the future. These fluctuations may result in reduced demand for new or upgraded fiber optic systems that utilize our products and, therefore, may result in reduced demand for our products.

10

The communications industry is also experiencing rapid consolidation and realignment, as industry participants seek to capitalize on the rapidly changing competitive landscape developing around the Internet and new communications technologies such as fiber optic and wireless communications networks. As the communications industry consolidates and realigns to accommodate technological and other developments, our customers may consolidate or align with other entities in a manner that harms our business.

WE MAY NOT BE ABLE TO SUCCESSFULLY MANAGE RAPID GROWTH. If we are successful in marketing our products, and if we receive orders for volume manufacturing, we will need to develop an infrastructure able to support growth, including comprehensive and reliable management information systems and additional manufacturing and other personnel. We may be unable to develop such systems or locate, hire, train and retain necessary personnel.

WE ARE DEPENDENT ON KEY PERSONNEL. Although we have hired a business manager for fiber optic products, as well as marketing and sales managers, we are still dependent upon the continued services of Dr. Anil K. Jain. The loss of his services could have a significant adverse impact upon the Company's operations and development. We do not have an employment agreement or a noncompete agreement with Dr. Jain, although we maintain \$1,000,000 in key man life insurance on him.

WE MAY NOT BE ABLE TO RECRUIT AND RETAIN THE PERSONNEL WE NEED TO SUCCEED. If we cannot hire and retain technical personnel with advanced skills and experience in the specialized field of fiber optics, our product development programs may be delayed and our customer support efforts may be less effective. If we are unable to hire the necessary managerial, sales and marketing personnel, we may not be able to increase our revenues.

WE ARE DEPENDENT ON SUPPLIERS. We rely on outside vendors to supply certain of the raw materials and other components of our products. To be competitive, we must obtain from our suppliers, on a timely basis, sufficient quantities of raw materials and components at acceptable prices. We obtain most of our critical raw materials and components from a limited number of suppliers and we do not yet have long-term supply contracts with any supplier. As a result, our suppliers could terminate or limit the supply of a particular material at any time.

Finding alternative sources of supply may involve significant expense and delay, if these sources can be found at all. Consolidation within our industry has included the purchase of suppliers by manufacturers, making it increasingly difficult to obtain reliable, long-term sources of materials and components. Our failure to obtain these materials could delay or reduce our product shipments, which could result in lost orders, increase our costs, reduce our control over quality and delivery schedules and require us to redesign our products. If a significant supplier became unable or unwilling to continue to manufacture or ship materials in required volumes, we would have to identify and qualify an acceptable replacement. A material delay or reduction in shipments, any need to identify and qualify replacement suppliers, or any significant increase in our need for raw materials that cannot be met on acceptable terms could harm our business.

We also depend on a limited number of manufacturers and vendors that make and sell the complex equipment we use in our manufacturing process. In periods of high market demand, the lead times from order to delivery of this equipment could be as long as nine months. If there are delays in the delivery of this equipment or if there are increases in the cost of this equipment, it could harm our operating results. Delivery delays, quality problems and price increases could hurt our ability to supply our customers with products in a timely manner, which can cause our shipments and revenues to decline.

OUR MARKETS ARE HIGHLY COMPETITIVE, AND IF WE ARE UNABLE TO COMPETE SUCCESSFULLY OUR REVENUES COULD DECLINE. The market for fiber optic components is intensely competitive. We believe that our principal competitors are the major manufacturers of optical components and modules, including vendors selling to third parties and business divisions within communication equipment suppliers.

Many of our current and potential competitors have significantly greater financial, technical, marketing, purchasing, manufacturing and other resources than we do. As a result, these competitors may be able to respond more quickly to new or emerging technologies and to changes in customer requirements, to devote greater resources to the development, promotion and sale of products, or to deliver competitive products at lower prices.

Several of our existing and potential customers are also current and potential competitors of ours. These companies may develop or acquire additional competitive products or technologies in the future and thereby reduce or cease their purchases from us. In light of the consolidation in the optical networking industry, we also believe that the size of the suppliers will be an increasingly important part of a purchaser's decision-making criteria in the future. We cannot assure you that we will be able to compete successfully with existing or new competitors or that the competitive pressures we face will not result in lower prices for our products, loss of market share, or reduced gross margins, any of which could harm our business.

New technologies are emerging due to increased competition and customer demand. The introduction of new products incorporating new technologies or the emergence of new industry standards could make our existing products noncompetitive. For example, new technologies are being developed in the design of wavelength division multiplexers that compete with thin film filters. Numerous patents in these industries are held by others, including our competitors and academic institutions. We have no means of knowing that a patent application has been filed until the patent is issued. Optical component suppliers may seek to gain a competitive advantage or other third parties may seek an economic return on their intellectual property portfolios by making infringement claims against us.

Defending these lawsuits, and any additional litigation to which we may become a party in the future as a result of alleged infringement or others' intellectual property, will likely be costly and time consuming and will divert the efforts and attention of our management and technical personnel. Patent litigation is highly complex and can extend for a protracted period of time, which can substantially increase the cost of litigation. Accordingly, the expenses and diversion of resources associated with either of these matters, or any other intellectual property litigation to which we may become a party, could seriously harm our business and financial condition. Any intellectual property litigation also could invalidate our proprietary rights and force us to do one or more of the following:

- o obtain from the owner of the infringed intellectual property right a license to sell or use the relevant technology, which license may not be available on reasonable terms, or at all;
- o stop selling, incorporating or using our products that use the challenged intellectual property;
- o pay substantial money damages; or
- o redesign the products that use the technology.

If we are forced to take any of these actions, it could result in a substantial reduction in our revenue and could result in losses over an extended period of time.

IF WE ARE UNABLE TO COMPLY WITH ENVIRONMENTAL LAWS AND REGULATIONS, OUR BUSINESS MAY BE HARMED. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous materials and waste products. We currently maintain a supply of several hazardous materials at our facilities. We might be required to incur significant cost to comply with environmental laws and regulations. In the event of an accident, we could be held liable for any damages that result, and the liability could exceed our resources.

BECAUSE CURRENT OFFICERS AND DIRECTORS OWN A LARGE PERCENTAGE OF OUR STOCK, THESE SHAREHOLDERS MAY BE ABLE TO CONTROL APA OPTICS AND ALSO PREVENT POTENTIALLY BENEFICIAL ACQUISITIONS OF APA OPTICS. As of August 15, 2000 our officers and directors beneficially owned approximately 22% of the outstanding shares of our common stock. Beneficial ownership includes shares of our common

stock subject to options exercisable within 60 days of August 15, 2000.

These shareholders, if acting together, may be able to elect all of our directors, and otherwise significantly influence matters requiring approval by our shareholders. This concentration of ownership and the lack of cumulative voting may also delay or prevent a third party from acquiring us.

These shareholders may have interests that differ from other shareholders of APA Optics, particularly in the context of potentially beneficial acquisitions of APA Optics. For example, to the extent that these stockholders are employees of APA Optics, they may be less inclined to vote for acquisitions of APA Optics involving the termination of their employment or diminution of their responsibilities or compensation.

WE DO NOT INTEND TO PAY DIVIDENDS. We intend to use any cash flows from operations to finance further growth of the Company's business. Accordingly, investors should not purchase the shares with a view towards receipt of dividends.

OUR STOCK PRICE MAY EXHIBIT VOLATILITY AND THE TRADING PRICE OF OUR STOCK MAY DECREASE DUE TO FACTORS BEYOND OUR CONTROL. Our common stock price has experienced substantial volatility in the past and is likely to remain volatile in the future. Volatility can arise as a result of the activities of short sellers and risk arbitrageurs and may have little relationship to our financial results or prospects. The trading prices of our common stock is also affected by the following factors, among others:

- o Variations in anticipated or actual results of operations;
- o Announcements of new products or technological innovations by competitors; and
- o Changes in earnings estimates of operational results by analysts.

Volatility can also result from divergence between our actual or anticipated financial results and/or status of product development or commercialization, and published expectations of analysts and announcements we may make. We attempt to address possible divergence through our public announcements and reports; however, the degree of specificity we can offer in such announcements, and the likelihood that any forward-looking statements we make will prove correct in actual results, can and will vary.

Our revenues and operating results have fluctuated significantly from quarter-to-quarter in the past and may fluctuate significantly in the future as a result of several factors, some of which are outside of our control. These factors include:

- o the size and timing of customer orders;

13

- o our ability to manufacture and ship our products on a timely basis;
- o our ability to obtain sufficient supplies to meet our product manufacturing needs;
- o our ability to meet customer product specifications and qualifications;
- o long and unpredictable sales cycles of up to a year or more;
- o our ability to sustain high levels of quality across all product lines; changes in our product mix;
- o customer cancellations or delivery deferrals;
- o seasonality of customer demand; and
- o difficulties in collecting accounts receivable.

Due to these factors, results are difficult to predict and you should not rely on quarter-to-quarter comparisons of our results of operations as an indication of our future performance. It is possible that, in future periods, our results of operations may be below the expectations of public market analysts and investors.

Moreover, the stock market from time to time has experienced extreme price and volume fluctuations, which have particularly affected the market prices for emerging growth companies and which have often been unrelated to the operating performance of these companies. These broad market fluctuations may adversely affect the market price of our common stock.

During the past three years from the date of this prospectus, the

market price per share of our common stock has fluctuated between approximately \$3.50 and \$60.

OUR BUSINESS MAY BE HARMED IF WE BECOME SUBJECT TO SECURITIES CLASS ACTION LITIGATION. In the past, following periods of volatility in the market price of a company's common stock, securities class action litigation has been brought against the issuing company. This type of litigation could be brought against us in the future. The litigation could be expensive and divert management's attention and resources, which could adversely affect our business and results of operations whether or not our defense is successful. If the litigation is determined against us, we could also be subject to significant liabilities.

THE MARKET PRICE OF OUR STOCK MAY FALL IF OTHER SHAREHOLDERS SELL THEIR STOCK. If our shareholders sell substantial amounts of our common stock in the public market following this offering, the market price of our common stock could fall. These sales also might make it more difficult for us to sell equity or equity-related securities in the future at a price we deem appropriate.

As of August 15, 2000, 11,893,860 shares of our common stock were outstanding. Substantially all of these shares are eligible for sale in the public market. In addition, we are currently registering for public sale 144,091 shares of common stock which may be offered upon exercise of other warrants and an indeterminate number of shares of common stock offered directly by the Company.

THE VALUE OF YOUR STOCK MAY DECREASE IF OTHER SECURITY HOLDERS EXERCISE THEIR OPTIONS OR WARRANTS OR CONVERT CONVERTIBLE SECURITIES. As of August 15, 2000 we had reserved 1,710,871 shares of our common stock for future issuance upon exercise of outstanding options and warrants. If these securities

14

are exercised, you may experience dilution in the book value and earnings per share of your common stock. This may cause the market price of our common stock to fall.

WE MAY ISSUE ADDITIONAL STOCK WITHOUT YOUR CONSENT. The Company has authorized 50 million shares of common stock, of which 11,893,860 shares are issued and outstanding as of August 15, 2000. The Board of Directors has authority, without action or vote of the shareholders, to issue all or part of the authorized but unissued shares. Additional shares may be issued in connection with future financings, acquisitions, employee plans, or otherwise. Any such issuance will dilute the percentage ownership interest of existing shareholders, and may dilute the book value of the common stock. In April 2000, we filed a registration statement for sale of up to \$100 million in common stock from time to time at prices related to current market prices (subject to discount in some circumstances) to institutional investors. As of August 15, 2000 we had sold approximately 2,845,868 shares for total gross proceeds of approximately \$41.5 million. We do not know the number or price of additional shares to be sold, or whether any additional shares will be sold. In addition, the Company is authorized to issue up to 5 million undesignated shares, of which 1,500 were designated and issued as 2% Series A Convertible Preferred Stock. All of these shares of Preferred Stock were redeemed by the Company in July 2000. The Board of Directors can issue additional preferred stock in one or more series and fix the terms of such stock without approval by shareholders. Preferred stock may include the right to vote as a series on particular matters, preferences as to dividends and liquidation, conversion and redemption rights and sinking fund provisions. The issuance of preferred stock could affect the rights of the holders of common stock adversely and reduce the value of the common stock. In addition, specific rights granted to holders of preferred stock could be used to restrict the Company's ability to merge with or sell its assets to a third party.

OUR DIRECTORS' LIABILITY IS LIMITED UNDER MINNESOTA LAW. Our Articles of Incorporation, as amended and restated, state that our directors are not liable for monetary damages for breach of fiduciary duty, except for a breach of the duty of loyalty, for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, for dividend payments or stock repurchases illegal under Minnesota law, and for any transaction in which the director derived an improper personal benefit. In addition, our bylaws provide that we shall indemnify our officers and directors to the fullest extent permitted by Minnesota law for all expenses incurred in the settlement of any actions against them in connection with their service as officers or directors of the Company.

ANTI-TAKEOVER PROVISIONS. Minnesota law provides Minnesota corporations with anti-takeover protections. These protective provisions could delay or prevent a change in control of the Company by requiring shareholder approval of significant acquisitions of voting stock of the Company. These provisions operate even when many shareholders may think a takeover would be in their best interests.

FORWARD-LOOKING STATEMENTS

This prospectus and the information which is incorporated by reference in this prospectus include "forward-looking statements" within the meaning of the securities laws. Statements about us and our expected financial position, business and financing plans are forward-looking statements. Forward-looking statements can be identified by, among other things, the use of forward-looking terminology such as "believes," "expects," "may," "will," "should," "seeks," "pro forma," "anticipates," "intends," or other variations or comparable terminology, or by discussions of strategy or intentions. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot assure you that our expectations will prove to be correct. Forward-looking statements are necessarily dependent upon assumptions, estimates and data that may be incorrect or imprecise and involve known and unknown risks, uncertainties and other factors. Accordingly, you should not consider our forward-looking

15

statements as predictions of future events or circumstances. A number of factors could cause our actual results, performance, achievements or industry results to be materially different from any future results, performance or achievements expressed or implied by our forward-looking statements. These factors include, but are not limited to: the competitive environment in our industry; changes in economic conditions in general and in our business; changes in prevailing interest rates and the availability of and terms of financing to fund our business; our ability to attract and retain qualified personnel; changes in our acquisition and capital expenditure plans; and other factors discussed in this prospectus including, without limitation, those in our filings with the Securities and Exchange Commission. Given these uncertainties, you should not rely on our forward-looking statements in making an investment decision. We disclaim any obligation to update you on any factors that may affect the likelihood of realization of our expectations and we do not intend to announce publicly the results of any revisions to any of our forward-looking statements to reflect future events or developments. All written and oral forward-looking statements attributable to us (including statements before and after the date of this prospectus) are expressly qualified by these cautionary statements.

USE OF PROCEEDS

We will receive approximately \$1,500,000 in payment of the exercise price if the warrants are exercised in full. Warrant exercise proceeds, if any, will be used for general corporate purposes. We will not receive any proceeds from the sale of the common stock by the selling shareholder.

PRICE RANGE OF COMMON STOCK

Effective August 16, 2000, our common stock is listed and traded in the Nasdaq National Market under the symbol "APAT." The following table shows the high and low closing sale prices as reported by the Nasdaq SmallCap Market during the last two fiscal years ended March 31, 1999 and 2000.

FISCAL YEAR	1999	1999	2000	2000
SALE PRICE	LOW	HIGH	LOW	HIGH
First Quarter	\$ 5.62	\$ 6.75	\$ 5.25	\$ 8.50
Second Quarter	4.25	6.00	3.50	7.93
Third Quarter	4.00	5.00	3.88	19.50
Fourth Quarter	4.75	10.00	11.31	64.00

We have never declared or paid a dividend on our common stock and the Board of Directors currently intends to retain all earnings, if any, for use in the business for the foreseeable future. Any future determination as to declaration and payment of dividends will be made at the discretion of the Board of Directors, subject to covenants in any loan documents restricting the payment of dividends. Our current loan agreements restrict our ability to pay dividends.

SELLING SHAREHOLDER

Ladenburg Thalmann & Co., the selling shareholder, has served and continues to serve as our placement agent in connection with a \$100 million registered offering of our common stock to institutional investors. The shares offered by Ladenburg consist of shares which it can acquire by exercising warrants issued by us in connection with its services as placement agent. We may be obligated to issue additional warrants to Ladenburg in the future in connection with its services for future placements of our stock.

The warrants are exercisable at \$17.84 and expire on June 20, 2003. The exercise price is subject to adjustment pursuant to the anti-dilution provisions

set forth in the warrant.

16

The following table sets forth the number of shares of common stock offered by this prospectus, the number of shares of common stock now owned by the selling shareholder, the number of shares of common stock that may be sold in this offering, and the number of shares of common stock the selling shareholder will own after the offering, assuming it sells all of the shares offered.

<TABLE>
<CAPTION>

NAME	BENEFICIAL OWNERSHIP PRIOR TO OFFERING		SHARES TO BE SOLD IN OFFERING	BENEFICIAL OWNERSHIP AFTER OFFERING	
	SHARES	PERCENTAGE		SHARES	PERCENTAGE
Ladenburg Thalmann & Co.	84,083 (1)	*	84,083	0	0

</TABLE>

* Less than 1%.

(1) Consists of the shares of our common stock issuable upon exercise of its warrants.

PLAN OF DISTRIBUTION

The selling shareholder has advised us that there are presently no underwriting arrangements with respect to the sale of the shares; however, such arrangements may exist in the future.

The selling shareholder and any of its pledgees, assignees and successors-in-interest may, from time to time, sell any or all of the shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling shareholder may use any one or more of the following methods when selling shares:

- o ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- o block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- o purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- o an exchange distribution in accordance with the rules of the applicable exchange;
- o privately negotiated transactions;
- o short sales;
- o broker-dealers may agree with the selling shareholders to sell a specified number of such shares at a stipulated price per share;
- o a combination of any such methods of sale; and
- o any other method permitted pursuant to applicable law.

The selling shareholder may also engage in short sales against the box, puts and calls and other transactions in securities of the Company or derivatives of Company securities and may sell or deliver shares in connection with these trades. The selling shareholder may pledge the shares to brokers under

17

the margin provisions of customer agreements. If the selling shareholder defaults on a margin loan, the broker may, from time to time, offer and sell the pledged shares.

Broker-dealers engaged by the selling shareholder may arrange for other

brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling shareholder (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling shareholder does not expect these commissions and discounts to exceed what is customary in the types of transactions involved.

The selling shareholder and any broker-dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

The selling shareholder may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

The selling shareholder is required to pay all fees and expenses incident to the registration of the shares.

EXPERTS AND LEGAL MATTERS

The financial statements of APA Optics, Inc. as of March 31, 2000 and 1999, and for each of the three years in the period ended March 31, 2000, incorporated by reference in this prospectus and in the registration statement of which this prospectus is a part have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon. Such financial statements have been incorporated by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The validity of the shares of common stock offered by this prospectus has been passed upon for the Company by Moss & Barnett, A Professional Association, Minneapolis, Minnesota.

MATERIAL CHANGES

There have been no material changes in the financial condition or business of the Company since its Report on Form 10-K for the fiscal year ended March 31, 2000 except for the registered placement of approximately 2,845,868 shares of common stock for gross proceeds of approximately \$41.5 million in common stock.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our Articles of Incorporation limit personal liability for breach of the fiduciary duty of our directors, to the fullest extent provided by the Minnesota Business Corporation Act. The Articles eliminate the personal liability of directors for damages occasioned by breach of fiduciary duty, except for liability based on the director's duty of loyalty to APA Optics, liability for acts or omissions not made in good faith, liability for acts or omissions involving intentional misconduct, liability based on payments of improper dividends, liability based on violations of state securities laws, and liability occurring prior to the date such provision was added. Any amendment to or repeal of these provisions will not be applied retroactively to adversely affect any right or protection of a director with respect to any acts or omissions occurring prior to the amendment or repeal. In addition, the Minnesota Business Corporation Act and our Bylaws provide that our officers and directors have the right to indemnification from the Company for liability arising out of certain actions to the fullest extent permissible by law.

This indemnification may be available for liabilities arising in connection with this offering. However, in the opinion of the Securities and Exchange Commission, indemnification for liabilities arising under the Securities Act of 1933 is against public policy as expressed in the Act and is therefore unenforceable.

ANTITAKEOVER STATUTE

Section 302A.671 of the Minnesota Business Corporation Act (the "Minnesota Act") applies, with certain exceptions, to any acquisition of voting stock of APA Optics, including the receipt of a proxy, from a person other than APA Optics, and other than in connection with certain mergers and exchanges to which APA Optics is a party, that results in the beneficial ownership by the acquiring party of 20% or more of the Company's voting stock then outstanding. Under Section 302A.671 any such acquisition must be approved by a majority vote of our shareholders. In general, in the absence of such approval, shares exceeding the threshold are denied voting rights and may be redeemed by us at the then fair market value within 30 days after the acquiring person fails to give a timely information statement to the Company or after the date that

shareholders vote not to grant voting rights to the acquiring person's shares.

Section 302A.673 of the Minnesota Act generally prohibits any business combination by a Minnesota company with any shareholder that purchases 10% or more of the company's voting shares (an "interested shareholder") within four years following the interested shareholder's share acquisition date, unless the business combination is approved by a committee of all of the disinterested members of the Board of Directors of the company before the share acquisition.

These statutory provisions could delay or prevent a change in control of APA Optics.

84,083 SHARES
APA OPTICS, INC.
COMMON STOCK

PROSPECTUS

_____, 2000

PART II. INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The estimated expenses in connection with the issuance and distribution of the Common Stock registered hereby, other than underwriting discounts and fees, are set forth in the following table:

SEC registration fee.....	\$ 397
Legal fees and expenses.....	5,000
Accounting fees and expenses.....	2,000
Blue Sky fees and expenses.....	-0-
Printing and engraving expenses.....	100
Miscellaneous.....	2,503

Total.....	\$ 10,000

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Unless prohibited in a corporation's articles or bylaws, Minnesota Statutes ss.302A.521 requires indemnification of officers, directors, employees and agents, under certain circumstances, against judgments, penalties, fees, settlements and reasonable expenses (including attorneys' fees and disbursements) incurred by such person in connection with a threatened or pending proceeding with respect to the acts or omissions of such person in his or her official capacity. The general effect of Minnesota Statutes ss.302A.521 is to reimburse (or pay on behalf of) directors and officers of the registrant any personal liability that may be imposed for certain acts performed in their capacity as directors and officers of the registrant, except where such persons have not acted in good faith. The Bylaws of the Registrant provide for such indemnification to the maximum extent permitted by Minnesota Statutes.

ITEM 16. EXHIBITS

Exhibit No.	Description of Exhibit
* 3.1	Restated Articles of Incorporation, as amended
* 3.2	Bylaws, as amended
**4.6	Form of common stock warrant issued to Ladenburg Thalmann & Co.
5.1	Opinion and Consent of Counsel to APA Optics
23.1	Consent of Ernst & Young LLP
23.2	Consent of Counsel to APA Optics (filed as part of Exhibit 5.1)

* Incorporated by reference to exhibit filed as a part of Form 10-KSB for

the fiscal year ended March 31, 1995.

** Incorporated by reference to exhibit filed as part of Form 10-K for the fiscal year ended March 31, 2000.

ITEM 17. UNDERTAKINGS

(a) Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (the "Act") may be permitted to directors, officers and controlling persons of the issuer pursuant to the foregoing provisions or otherwise, the issuer has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the

2

payment by the issuer of expenses incurred or paid by a director, officer or controlling person of the issuer 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, the issuer 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 Act and will be governed by the final adjudication of such issue.

(b) Because the registration statement incorporates Exchange Act documents filed subsequent to the effective date of the registration statement, the Company hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Company's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) If the Company relies upon Rule 430A under the Act, the Company undertakes that, for determining any liability under the Act, it will:

(1) Treat the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed under Rule 424(b)(1) or (4) or 497(h) under the Act as part of this registration statement as of the time the Commission declared it effective.

(2) Treat each post-effective amendment that contains a form of prospectus as a new registration statement for the securities offered in the registration statement, and that offering of the securities at that time as the initial bona fide offering of those securities.

(d) Insofar as the Company is registering securities under Rule 415 of the Securities Act, the Company will:

(1) file, during any period in which it offers or sells securities, a post-effective amendment to this registration statement to include any additional or changed material information on the plan of distribution.

(2) for determining liability under the Securities Act, treat each post-effective amendment as a new registration statement of the securities offered, and the offering of the securities at that time to be the initial bona fide offering.

(3) File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering.

3

SIGNATURES

In accordance with the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly authorized this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Minneapolis, State of Minnesota, on August 16, 2000.

By: /s/ Anil K. Jain

Anil K. Jain, Chief Executive Officer
(Principal executive officer)

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints Anil K. Jain, his true and lawful attorney-in-fact and agent with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by Rule 462(b) promulgated under the Securities Act of 1933, as amended, and any and all amendments (including post-effective amendments) thereto, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming that said attorney-in-fact and agent or his substitute, may lawfully do or cause to be done by virtue hereof.

SIGNATURE	TITLE	DATE
/s/ Anil K. Jain ----- Anil K. Jain	Chief Executive Officer (Principal executive officer)	August 16, 2000
/s/ Robert Ringstad ----- Robert Ringstad	Chief Financial Officer (Principal financial and accounting officer)	August 16, 2000
/s/ Kenneth A. Olsen ----- Kenneth A. Olsen	Director	August 16, 2000
/s/ Gregory J. Von Wald ----- Gregory J. Von Wald	Director	August 16, 2000
/s/ Michael A. Gort ----- Michael A. Gort	Director	August 16, 2000

4

/s/ William R. Franta ----- William R. Franta	Director	August 16, 2000
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*Executed by the undersigned as attorney-in-fact for the named signatory

/s/ Anil K. Jain ----- Anil K. Jain		August 16, 2000
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5

August 16, 2000

APA Optics, Inc.
2950 N.E. 84th Lane
Blaine, MN 55449

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel for APA Optics, Inc. (the "Company") in connection with a Registration Statement on Form S-3 (the "Registration Statement") that relates to the issuance of up to 84,083 shares of common stock of the Company issuable upon exercise of warrants for purchase of common stock (collectively, the "Shares").

In connection with the registration of the Shares, we have examined such documents, records and matters of law as we have deemed necessary to the rendering of the following opinion. Based upon that review, it is our opinion that upon receipt of payment in full therefor, the Shares being registered, when issued by the Company, will be validly issued, fully paid and non-assessable.

The foregoing opinion is subject to the qualification that the Shares or any of them, when issued, will not when taken together with the then issued and outstanding capital stock of the Company, exceed the authorized capital stock of the Company.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to the use of our name wherever it appears in the Registration Statement, including the prospectus constituting a part thereof, and any amendments thereto.

Very truly yours,

MOSS & BARNETT,
A Professional Association

Janna R. Severance

CONSENT OF INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts and Legal Matters" in the Registration Statement and related Prospectus of APA Optics, Inc. for the registration of 84,083 shares of its common stock and to the incorporation by reference therein of our report dated May 5, with respect to the financial statements of APA Optics, Inc. included in its Annual Report (Form 10-K) for the year ended March 31, 2000, filed with the Securities and Exchange Commission.

ERNST & YOUNG LLP

Minneapolis, Minnesota
August 16, 2000