

SECURITIES AND EXCHANGE COMMISSION
 WASHINGTON, DC 20549

 FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

 APA OPTICS, INC.
 (Exact Name of Registrant as Specified in Its Charter)

MINNESOTA	41-1347235
(State or Other Jurisdiction	(IRS Employer
of Incorporation or Organization)	Identification No.)

2950 N.E. 84TH LANE,
 BLAINE, MINNESOTA 55449
 (Address of Principal Executive Offices) (Zip Code)

APA OPTICS, INC. 1997 STOCK COMPENSATION PLAN
 (Full title of the plan)

ANIL K. JAIN, CHIEF EXECUTIVE OFFICER
 2950 N.E. 84TH LANE
 BLAINE, MINNESOTA 55449
 (Name and address of agent for service)

(763) 784-4995
 (Telephone number, including area code, of agent for service)

Copies to:
 DEANNE M. GRECO, ESQ.
 MOSS & BARNETT
 A PROFESSIONAL ASSOCIATION
 4800 WELLS FARGO CENTER
 90 SOUTH 7TH STREET
 MINNEAPOLIS, MN 55402
 TELEPHONE: (612) 347-0287

<TABLE>
 <CAPTION>

CALCULATION OF REGISTRATION FEE

TITLE OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED	PROPOSED MAXIMUM OFFERING PRICE PER SHARE (1)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE (1)	AMOUNT OF REGISTRATION FEE
<S> Common Stock, .01 par value	<C> 250,000 shares	<C> \$ 2.85	<C> \$ 712,500.00	<C> \$ 178.13

(1) Estimated solely for the purpose of calculating the registration fee, based upon the average of the high and low prices of the Common Stock as reported by The Nasdaq Stock Market on November 27, 2001.

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, check the following box. [x]

The contents of Registration Statement on Form S-8 (SEC No. 333-44488), filed August 25, 2000, are incorporated herein by reference.

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 SIGNATURES AND POWER OF ATTORNEY

Pursuant to 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-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Minneapolis, State of Minnesota, on November 14, 2001.

By /s/ Anil K. Jain

 Anil K. Jain, President and
 Chief Executive Officer

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Anil K. Jain, Robert M. Ringstad and Deanne M. Greco, and each of them, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution 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 on Form S-8, including any amendment increasing or decreasing the amount of securities for which registration is being sought or any registration statement for the same offering filed in accordance with Rule 462(b) under the Securities Act of 1933, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or 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 all that said attorneys-in-fact and agents or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated:

SIGNATURE	TITLE	DATE
/s/ Anil K. Jain ----- Anil K. Jain	Chief Executive Officer (Principal executive officer) and Director	November 14, 2001
/s/ Robert Ringstad ----- Robert Ringstad	Chief Financial Officer (Principal financial and accounting officer)	November 14, 2001
/s/ Kenneth A. Olsen ----- Kenneth A. Olsen	Director	November 14, 2001
/s/ Gregory J. Von Wald ----- Gregory J. Von Wald	Director	November 14, 2001
/s/ Michael A. Gort ----- Michael A. Gort	Director	November 13, 2001
/s/ William R. Franta ----- William R. Franta	Director	November 14, 2001

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 EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION OF EXHIBIT	PAGE NO.
5	Opinion of Counsel	5
23.1	Consent of Counsel (included in Exhibit 5)	
23.2	Consent of Independent Auditors.	7
24	Powers of Attorney from Messrs. Jain, Ringstad, Olsen, Von Wald, Gort, and Franta (included on signature page)	

November 29, 2001

Board of Directors
APA Optics, Inc.
2950 N.E. 84th Lane
Blaine, Minnesota 55449

Re: Registration Statement for 250,000 Shares of Common Stock to be issued pursuant to APA Optics, Inc. 1997 Stock Compensation Plan
Our File No.: 52226.1

Gentlemen:

This opinion is given in connection with the filing by APA Optics, Inc. (the "Registrant") with the Securities and Exchange Commission under the Securities Act of 1933, of a Registration Statement on Form S-8 (the "Registration Statement"), with respect to 250,000 shares of the Registrant's Common Stock, \$.01 par value (the "Shares"), that may be issued upon exercise of options or other awards that have been or may be granted under the Registrant's 1997 Stock Compensation Plan (the "Plan"). These shares are in addition to the 500,000 shares registered pursuant to Registration Statement on Form S-8 (SEC No. 333-44488) filed on August 25, 2000.

We have acted as counsel for the Registrant in connection with the filing of the Registration Statement. In so acting, we have examined the originals or copies, certified or otherwise identified to our satisfaction, of all corporate instruments and have made such inquiries of officers and representatives of the Registrant as we have deemed relevant and necessary as a basis for the opinion hereinafter set forth. In such examination, we have assumed the genuineness of all signatures and the authenticity of all documents submitted to us as originals and the conformity to the original of documents submitted to us as certified or photostatic copies. As to questions of fact material to such opinion that we have not independently established, we have relied upon representations or certificates of officers and directors of the Registrant.

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Board of Directors
November 29, 2001
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Based upon the foregoing, we are of the following opinion:

1. The Registrant has been duly incorporated and is validly existing as a corporation under the laws of the State of Minnesota.
2. The Shares have been duly authorized and when issued and delivered as contemplated under the Plan will be validly issued and outstanding, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement. We further consent to the use of this opinion as an exhibit to applications to the securities commissioners of various states of the United States for registration therein of various aggregate amounts of the Shares.

Very truly yours,

MOSS & BARNETT
A Professional Association

/s/ Deanne M. Greco

Deanne M. Greco

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CONSENT OF INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statement on Form S-8 of APA Optics, Inc. of our report dated May 11, 2001, with respect to the financial statements of APA Optics, Inc. included in its Annual Report on Form 10-K for the year ended March 31, 2001, filed with the Securities and Exchange Commission.

ERNST & YOUNG LLP

Minneapolis, Minnesota
November 29, 2001