NOVA MEASURING INSTRUMENTS LTD
Form 20-F
June 26, 2003

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 20-F

¨ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) or (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

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

For the fiscal year ended December 31, 2002

OR

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

for the transition period from _____ to _____

Commission File Number 333-11640

NOVA MEASURING INSTRUMENTS LTD.

(Exact name of Registrant as specified in its charter)

Nova Measuring Instruments Ltd.	**Israel**
(Translation of Registrant s name into English)	**(Jurisdiction of incorporation or organization)**

Weizmann Science Park, Building 22, 2nd Floor, Rehovot 76100, Israel
(Address of principal executive offices)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	**Name of each exchange on which registered**
None	None

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Ordinary Shares, nominal value NIS 0.01 per share

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

Indicate the number of outstanding shares of each of the issuer s classes of capital or common stock as of the close of the period covered by the annual report:

14,938,909 Ordinary Shares, NIS 0.01 nominal (par) value per share, as of June 16, 2003

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes x No ¨

Indicate by check mark which financial statement item the registrant has elected to follow:

Item 17 x Item 18 ¨

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Introduction

In this Annual Report, the "Company," "Nova" or "we" refers to Nova Measuring Instruments Ltd. and its consolidated subsidiaries, when the context requires.

The consolidated financial statements and selected consolidated financial data as of December 31, 1998, 1999, 2000, 2001 and 2002 and for each of the years in the five-year period ended December 31, 2002 (the Consolidated Financial Statements), included in this Annual Report have been prepared in accordance with United States generally accepted accounting principles (U.S. GAAP).

Our Functional Currency

Unless otherwise indicated, all amounts herein are expressed in United States dollars ("U.S. dollars," "dollars," "USD," "US$" or "$").

The currency of the primary economic environment in which we operate is the U.S. dollar, since substantially all our revenues to date have been denominated in U.S. dollars and over 50% of our expenses are in dollars or in New Israeli Shekels linked to the dollar. Transactions and balances denominated in dollars are presented at their original amounts. Non-dollar transactions and balances have been re-measured into dollars as required by the principles in Statement No. 52 of the Financial Accounting Standards Board (FASB) of the United States. All exchange gains and losses from such re-measurement are included in the net financial income when they arise.

Cautionary Statement Regarding Forward-Looking Statements

Certain information contained herein, which does not relate to historical financial information, may be deemed to constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The words or phrases will likely result, are expected to, will continue, is anticipated, estimate, project, believe, plan , or similar expressions identify forward looking statement statements are subject to certain risks and uncertainties that could cause actual results to differ materially from historical results and those presently anticipated or projected. We wish to caution readers not to place undue reliance on any such forward-looking statements, which speak only as of the date made. We undertake no obligation to release publicly any revisions to these forward looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Among the factors that could cause our actual results in the future to differ materially from any opinions or statements expressed with respect to future periods are competitive industry conditions in Israel and various other factors set forth in Item 3. Key Information and elsewhere herein.

PART I

Item 1. Identity of Directors, Senior Management and Advisors

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

Selected Financial Data

The tables below set forth selected consolidated financial data for the Company for the periods indicated and are qualified by reference to, and should be read in conjunction with, the Company s Consolidated Financial Statements and the Notes thereto, which are included elsewhere in this Annual Report, and Item 5. Operating and Financial Review and Prospects.

Summary of Consolidated Financial Data

	Year ended December 31,				
	1998	1999	2000	2001	2002
	(in thousands, except per share data)				
Consolidated Statement of Operations Data:					
Revenues	$23,370	$27,581	$48,463	$21,171	$20,371
Cost of revenues	12,985	14,668	23,478	16,470	13,353
Gross profit	10,385	12,913	24,985	4,701	7,018
Operating expenses:					
Research and development expenses, net	5,051	8,569	13,878	13,253	9,894
Sales and marketing expenses	2,968	4,280	7,998	6,852	6,950
General and administrative expenses	1,332	1,458	3,186	3,032	1,797
Other operating expenses	--	4,000	--	1,025	1,478
Total operating expenses	9,351	18,307	25,062	24,162	20,119
Operating income (loss)	1,034	(5,394)	(77)	(19,461)	(13,101)
Financing income, net	330	509	2,858	2,587	144
Other expenses	--	(150)	--	--	--
Net income (loss)	$1,364	$(5,035)	$2,781	$(16,874)	$(12,957)
Earnings (loss) per share:					
Basic earnings (loss) per share	$0.17	$(0.49)	$0.20	$(1.16)	$(0.88)
Diluted earnings (loss) per share	$0.12	--	$0.19	--	--
Shares used in calculation of basic earnings (loss) per share	7,853	10,332	13,580	14,578	14,786
Shares used in calculation of diluted earnings per share	11,493	--	14,691	--	--

	December 31,				
	1998	1999	2000	2001	2002
	(in thousands)				
Consolidated Balance Sheet Data:					
Working capital	$9,343	$7,168	$61,270	$45,529	$34,574
Total assets	18,039	20,772	81,825	59,564	49,008
Shareholders' equity	10,453	8,276	62,619	47,006	35,677
Dividends declared	--	--	--	--	--

Risk Factors

Risks Related to Our Business and Our Industry

Because substantially all our current sales are dependent on a single product line, factors that adversely affect the pricing and demand for this product line could substantially reduce our sales.

Although we have expanded our product offering, we are currently dependent on a single integrated process control product line targeting the chemical mechanical polishing market. We expect revenues from this product line to continue to account for a substantial portion of our future revenues for at least the next year. As a result, factors adversely affecting the pricing of or demand for integrated process control for the chemical mechanical polishing equipment field, such as competition and technological change, could substantially reduce our sales.

Our inability to reduce spending during a protracted slowdown in the semiconductor industry could reduce our prospects of achieving profitability.

Historically, we have derived all of our revenues, and we expect to continue to derive all of our revenues from sales of our products and related services to the semiconductor industry. Our business depends in large part upon capital expenditures by semiconductor manufacturers, which in turn depend upon the current and anticipated demand for semiconductors. The semiconductor industry has experienced, and is currently experiencing, severe and protracted cyclical downturns, characterized by slowing product demand, inventory surpluses, accelerated erosion of average selling prices and production overcapacity. These downturns, including the current one, have materially reduced demand for the type of capital equipment and process technology that we offer and our sales and revenues have declined. In addition, our ability to reduce expenses in response to any downturn or slowdown in the rate of capital investment by manufacturers in these industries may be limited because of:

- our continuing need to invest in research and development,
- our capital equipment requirements, and
- our extensive ongoing customer service and support requirements worldwide.

If we do not respond effectively and on a timely basis to rapid technological change, our ability to attract and retain customers could be diminished, which would hurt our sales and ability to remain competitive.

The semiconductor manufacturing industry is characterized by rapid technological change, new product introductions and enhancements and evolving industry standards. Our ability to remain competitive and generate sales revenue will depend in part upon our ability to develop new and enhanced systems at competitive prices in a timely and cost-effective manner and to accurately predict technology transitions. Because new product development commitments must be made well in advance of sales, new product decisions must anticipate the future demand for products. If we fail to correctly anticipate future demand for products, our sales and competitive position could suffer. In addition, the development of new measurement technologies, new product introductions or enhancements by our competitors could cause a decline in sales or loss of market acceptance of our existing products. For example, some of our competitors are attempting to develop sensors that would measure wafers simultaneously in the chamber as they are being processed. If the efforts of our competitors to produce and market products utilizing this alternative technology are successful, our business could suffer. Increased competitive pressure could also lead to intensified price competition, resulting in lower margins.

We may not be able to develop or market new products, which could slow or prevent our growth.

Our business plan requires the introduction of several new product lines. Our plans to introduce process control products for photolithography, etch and other processes will require development of new capabilities. Some of these projects are in the early stages of development, and we cannot be certain that we will be able to develop or bring to market these new product lines or, if we do, that these products will be well received or profitable. If we are unable to successfully introduce new product lines, our future growth could be adversely affected.

New product lines that we may introduce in the future may contain defects, which will require us to allocate time and financial resources to correct.

Our new product lines may contain defects when first introduced. If there are defects, we will need to divert the attention of our personnel from our product development efforts to address the detection and correction of the defects. In the past, no liability claims have been filed against us for damages related to product defects, and we have not experienced any material delays as a result of product defects. However, we cannot assure you that we will not incur these costs or liabilities or experience these lags or delays in the future. Moreover, the occurrence of

such defects, whether caused by our products or the products of another vendor, may result in significant customer relations problems and injury to our reputation and may impair the market acceptance of our products.

We have had a history of losses and may incur future losses.

Since our inception in 1993, we have incurred net losses in every year other than in 1998 and 2000, and our losses may continue. As of December 31, 2002, we had an accumulated deficit of $36.2 million. We plan to continue the level of our aggregate product development, sales and marketing and administrative expenses over the next 12 months. Accordingly, to achieve profitability, we will need to increase our revenues. We cannot assure you that our revenues will grow or that we will achieve profitability in the future.

Because we have a limited operating history with one product line, our historical results may not be indicative of our future results, and it is difficult to evaluate our business and prospects.

Our first system for chemical mechanical polishing applications was developed and introduced to the market in October 1995. Because this is the only product line with which we have significant manufacturing and marketing experience and because of our focus on the development and introduction of new products, our past operating results may not be indicative of our future results. Companies in an early stage of product development frequently have higher risks and encounter unexpected expenses and difficulties. These risks, expenses and difficulties apply particularly to us because the semiconductor manufacturing business is a rapidly evolving market characterized by technological advances. The uncertainty of our future performance increases the risk that the value of your investment will decline.

We experience quarterly fluctuations in our operating results, which may adversely impact our stock price.

Our quarterly operating results have fluctuated significantly in the past, and we expect this trend to continue. A principal reason is that we derive a substantial portion of our revenue from the sale of a relatively small number of systems to a relatively small number of customers. As a result, our revenues and results of operations for any one quarter may decrease due to factors relating to the timing of orders by, and shipments of systems to, significant customers.

We also have a limited ability to predict revenues for future quarterly periods and face risks of revenue shortfalls due to our limited sales backlog in current periods. If the number of systems we actually ship, and thus the amount of revenues we are able to record in any particular quarter, is below our expectations, the adverse effect may be magnified by our inability to adjust spending quickly enough to compensate for the revenue shortfall.

We may not be able to expand our manufacturing capacity or marketing efforts quickly enough to support our future growth.

Because of our small size and our business strategy to aggressively increase our sales, we anticipate an increased demand on all of our resources. If we do not accurately estimate our need for personnel, manufacturing capacity or marketing and customer support, we may not be able to support our future growth.

We depend on a small number of large customers, and the loss of one or more of them would lower our revenues.

Our customer base is highly concentrated among a limited number of large customers, primarily because the semiconductor industry is dominated by a small number of large companies. The following table indicates the percentage of our total revenues derived from sales to our five largest customers and the percentage range of these revenues from these customers for the periods indicated:

	Year ended December 31,			
	1999	2000	2001	2002
Total revenues from five largest customers	73%	66%	81%	86%
Range of revenues from five largest customers	4%-47%	6%-21%	2%-33%	4%-29%

We anticipate that our revenues will continue to depend on a limited number of major customers, although the companies considered to be our major customers and the percentage of our revenue represented by each major customer may vary from period to period. Furthermore, if any of our customers become insolvent or have difficulties meeting their financial obligations to us as a result of the current protracted slowdown in

the semiconductor industry or as a result of any other reason, we may suffer losses.

We operate in an extremely competitive market, and if we fail to compete effectively, our revenues and market share will decline.

Although the market for integrated process control systems used in semiconductor manufacturing is currently concentrated and characterized by relatively few participants, the semiconductor capital equipment industry is intensely competitive. We compete with Nanometrics Inc., Therma-Wave Inc. and Rudolph Technologies Inc., which manufacture and sell integrated process control systems. In addition, we compete with established manufacturers of conventional stand-alone measurement equipment, such as KLA-Tencor Corp., and original equipment manufacturers of semiconductor equipment, such as Tokyo Electron Ltd. Established companies, both domestic and foreign, compete with our product line, and new competitors are entering our market. Many of our competitors have greater financial, engineering, manufacturing and marketing resources than we do. If a particular customer selects a competitor s capital equipment, we expect to experience difficulty in selling to that customer for a significant period of time. A substantial investment is required by customers to evaluate, test, select and integrate capital equipment into a production line. As a result, once a manufacturer has selected a particular vendor s capital equipment, we believe that the manufacturer generally relies upon that equipment for the specific production line application and frequently will attempt to consolidate its other capital equipment requirements with the same vendor. We believe that our ability to compete successfully depends on a number of factors both within and outside of our control, including:

- the contribution of our equipment to our customers' productivity;
- our product quality and performance;
- our global technical service and support;
- the return on investment (ROI) of our equipment and its cost of ownership;
- the breadth of our product line; and
- our success in developing and marketing new products.

If we fail to compete in a timely and cost-effective manner against current or future competitors, our revenues and market share will decline.

The ongoing consolidation in our industry may harm us if our competitors are able to offer a broader range of products and greater customer support than we can offer.

We believe that the semiconductor capital equipment market is undergoing consolidation. A number of suppliers have been acquired by larger equipment manufacturers. For example, in 2001 Therma-Wave Inc. acquired Sensys Instruments Corp. and in 2002 Rudolph Technologies Inc. acquired ISOA Inc. We believe that similar acquisitions and business combinations involving our competitors and customers may occur in the future. These acquisitions could adversely impact our competitive position by enabling our competitors and potential competitors to expand their product offerings and customer service, which could afford them an advantage in meeting customers needs, particularly with those customers that seek to consolidate their capital equipment requirements with the same vendor. The greater resources, including financial, marketing and support resources, of competitors involved in these acquisitions could permit them to accelerate the development and commercialization of new competitive products and the marketing of existing competitive products to their larger installed bases. Accordingly, such business combinations and acquisitions by competitors or customers could jeopardize our competitive position.

Because we are small, we depend on a small number of employees who possess both executive and technical expertise, and the loss of any of these key employees would hurt our ability to implement our strategy and to compete effectively.

Because of our small size and our reliance on employees with both executive and advanced technical skills, our success depends significantly upon the continued contributions of our officers and key personnel, particularly Giora Dishon, our President and Chief Executive Officer. All of our key management and technical personnel have expertise, which is in high demand among our competitors, and the loss of any of these individuals could cause our business to suffer. We do not maintain life insurance policies for our officers and directors.

Our lengthy sales cycle increases our exposure to customer cancellations or delays in orders, which may result in obsolete inventory and volatile quarterly revenues.

Sales of our systems depend, in significant part, upon our customers adding new manufacturing capacity or expanding existing manufacturing capacity, both of which involve a significant capital commitment. We may experience delays in finalizing sales following initial system qualification while a customer evaluates and approves an initial purchase of our systems. In general, for new customers or applications, our sales cycle takes between 3 and 24 months to complete. During this time, we may expend substantial funds and management effort. Lengthy sales cycles subject us to a number of significant risks, including inventory obsolescence and fluctuations in operating results over which we

have little or no control.

Because of the technical nature of our business, our intellectual property is extremely important to our business, and our inability to protect our intellectual property would harm our competitive position.

As of December 31, 2002, we had obtained 19 U.S. patents and had 29 U.S. patent applications pending. In addition, we had obtained 14 foreign patents and had 70 foreign patent applications pending.

We cannot assure you that:

- pending patent applications will be approved;
- any patents will be broad enough to protect our technology, will provide us with competitive advantages or will not be challenged or invalidated by third parties; or
- the patents of others will not have an adverse effect on our ability to do business.

We cannot assure you that others will not independently develop similar products, duplicate our products or, if patents are issued to us, design around these patents. Further, because patents may afford less protection under foreign law than is available under U.S. law, we cannot assure you that any foreign patents issued to us will adequately protect our proprietary rights.

In addition to patent protection, we also rely upon trade secret protection, employee and third-party nondisclosure agreements and other intellectual property protection methods to protect our confidential and proprietary information. Despite these efforts, we cannot be certain that others will not otherwise gain access to our trade secrets or disclose our technology.

There has been significant litigation involving intellectual property rights in the semiconductor and related industries and similar litigation involving Nova could force us to divert our limited resources to defend against this litigation or deter our customers from purchasing our systems.

We have been, and may in the future be, notified of allegations that we may be infringing intellectual property rights possessed by others. In addition, we may be required to commence legal proceedings against third parties which may be infringing our intellectual property, in order to defend our intellectual property. We are aware that a patent held by a third party that does not compete with us may cover aspects of operating our measurement system. We have not received any notice from this third party of infringement of this patent. In the future, protracted litigation and expense may be incurred to defend ourselves against alleged infringement of third party rights or to defend our intellectual property against infringement by third parties. Adverse determinations in that type of litigation could:

- result in our loss of proprietary rights;
- subject us to significant liabilities, including treble damages in some instances;
- require us to seek licenses from third parties, which licenses may not be available on reasonable terms or at all; or
- prevent us from selling our products.

Any litigation of this type, even if we are ultimately successful, could result in substantial cost and diversion of time and effort by our management, which by itself could have a negative impact on our profit margin, competitive position and ability to develop and market new and existing products.

We depend on a limited number of suppliers, and in some cases a sole supplier. Any disruption or termination of these supply channels may adversely affect our ability to manufacture our products and to deliver them to our customers.

We purchase components, subassemblies and services from a limited number of suppliers and occasionally from a single source. Disruption or termination of these sources could occur, and these disruptions could have at least a temporary adverse effect on our operations. To date, we have not experienced any material disruption or termination of our supply sources. A prolonged inability on our part to obtain components included in our systems on a cost-effective basis could adversely impact our ability to deliver products on a timely basis which could harm our sales and customer relationships.

We are dependent on international sales, which expose us to foreign political and economic risks that could impede our plans for expansion and growth.

Our principal customers are located in the United States, Japan, Taiwan and South Korea and we produce our products in Israel. International operations expose us to a variety of risks that could seriously impact our financial condition and impede our growth. For instance, trade restrictions, changes in tariffs and import and export license requirements could adversely affect our ability to sell our products in the countries adopting or changing those restrictions, tariffs or requirements.

Because we derive a significant portion of our revenues from sales in Asia, our sales could be hurt by the instability of Asian economies.

A number of Asian countries have recently experienced political and economic instability. For instance, Taiwan and China have had a number of disputes, as have North and South Korea, and Japan has for a number of years experienced significant economic instability. We have a subsidiary in Taiwan and we have significant customers in Japan and South Korea. An outbreak of hostilities or other political upheaval or economic downturns in these or other Asian countries would likely harm the operations of our customers in these countries, causing our sales to suffer.

A large number of our ordinary shares continue to be owned by a relatively small number of shareholders, whose future sales of our stock, if substantial, may depress our share price.

If our principal shareholders sell substantial amounts of our ordinary shares, including shares issued upon the exercise of outstanding employee options, the market price of our ordinary shares may fall. As of December 31, 2002 we had 14,929,867 ordinary shares outstanding, of which 11,178,899 shares were held by seven shareholders.

Because a small group of major shareholders have a significant influence over our business, this group could prevent a change of control or other business combination involving Nova at a premium over the then prevailing price for our ordinary shares.

As of December 31, 2002, three of our principal shareholders held an aggregate of approximately 47% of our outstanding ordinary shares. Three of our directors are currently representatives of these shareholders. By virtue of their stock ownership and board representation, these shareholders will continue to have significant influence over matters submitted to our board and our shareholders, including election of our directors, and will be able to exercise significant control over our business, policies and affairs, including any matters relating to a proposed change of control of Nova or other business combination.

Risks Related to Operations in Israel

Potential political, economic and military instability in Israel may adversely effect our growth and revenues.

Our principal offices and manufacturing facilities and many of our suppliers are located in Israel. Although most of our sales are currently being made outside Israel, political, economic and military conditions in Israel directly affect our operations. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors. Conflicts between Israel and the Palestinian Authority have been ongoing. A state of hostility, varying in degree and intensity, has led to security and economic problems for Israel. The resumption of hostilities in the region which have occurred after the failure of Camp David peace talks, as well as the events of September 11, 2001, and the intensification of such hostilities in recent months, have a negative effect on the stability of the region which might have negative effect on our business conditions and harm our growth and revenues. For further detail see Item 5, paragraph Political and economic conditions in Israel .

Our operations may be disrupted by the obligation of key personnel to perform military service.

Some of our executive officers and employees in Israel are obligated to perform up to 45 days of military reserve duty annually. This time-period may be extended by the Minister of Defense or in the event of a declared national emergency. Our operations could be disrupted by the absence for a significant period of one or more of our executive officers or key employees due to military service. To date, our operations have not been materially disrupted as a result of these military service obligations, and no executive officer or key employee was recruited for any significant time period. Any disruption in our operations due to such obligations would adversely affect our ability to produce and market our existing products and to develop and market future products.

Because most of our revenues are generated in U.S. dollars, but a significant portion of our expenses is incurred in New Israeli Shekels, our profit margin may be seriously harmed by inflation and currency fluctuations.

We generate most of our revenues in U.S. dollars, but incur a significant portion of our expenses in New Israeli Shekels, commonly referred to as NIS. As a result, we are exposed to risk to the extent that the rate of inflation in Israel exceeds the rate of devaluation of the NIS in relation to the dollar or if the timing of this devaluation lags behind inflation in Israel with respect to such expenses that might increase as a result of inflation in Israel. In that event, the dollar cost of our operations in Israel will increase and our dollar measured results of operations will be adversely affected. Our operations also could be adversely affected if we are unable to hedge against currency fluctuations in the future. Accordingly, we may enter into currency hedging transactions to decrease the risk of financial exposure from fluctuations in the exchange rate of the dollar against the NIS. These measures, however, may not adequately protect us from material adverse effects due to the impact of inflation in Israel.

We participate in government programs under which we receive tax and other benefits. The reduction or termination of these programs would increase our costs.

We receive conditional grants from the Office of the Chief Scientist of the Israeli Ministry of Industry and Trade for research and development programs that meet specified criteria. We are also eligible to receive tax benefits under Israeli law for capital investments that are designated as approved enterprises. To maintain our eligibility for these programs and tax benefits, we must continue to meet conditions, including paying royalties related to grants received and making specified investments in fixed assets. In addition, some of these programs restrict our ability to manufacture particular products and transfer particular technology outside of Israel. If we fail to comply with these conditions in the future, the benefits received could be cancelled. We could also be required to pay increased taxes or refund any benefits previously received, adjusted for inflation and interest. In 2001 and in 2002, we recorded an aggregate of $1.8 million and $1.7 million, respectively, in conditional grants under Israeli government programs. As of December 31, 2001, our contingent liability to the Office of the Chief Scientist for grants received was approximately $1.4 million. As of December 31, 2002, our contingent liability to the Office of the Chief Scientist for grants received was approximately $0.7 million. From time to time, we submit requests for new grants from the Office of the Chief Scientist and for expansion of our approved enterprise programs or for new programs. These requests might not be approved. The Israeli government has reduced the benefits available under these programs in recent years and has indicated that it may reduce or eliminate these benefits in the future. The termination or reduction of these grants and tax benefits could harm our business, financial condition and results of operations. In addition, if we increase our activities outside the State of Israel due to, for example, future acquisitions, our increased activities generally will not be eligible for inclusion in Israeli tax benefit programs. Accordingly, our effective corporate tax rate could increase significantly in the future.

Any shareholder with a cause of action against us as a result of purchasing our ordinary shares, or as a result of buying, selling or holding our ordinary shares may have difficulty asserting a claim under U.S. securities laws or enforcing a U.S. judgment against us or our officers, directors or Israeli auditors.

We are organized under the laws of the State of Israel, and we maintain significant operations in Israel. Substantially all of our officers and directors as well as our Israeli auditors reside outside of the United States and a substantial portion of our assets and the assets of these persons are located outside the United States. Therefore, you might not be able to enforce any judgment obtained in the United States against us or any of such persons. Additionally, you might not be able to bring civil actions under U.S. securities laws if you file a lawsuit in Israel. We have been advised by our Israeli counsel that Israeli courts generally enforce a final executory judgment of a U.S. court for liquidated amounts in civil matters after a hearing in Israel. If a foreign judgment is enforced by an Israeli court, it will be payable in Israeli currency.

Our shares are listed for trade on more than one stock exchange, and this may result in price variations.

Our ordinary shares are listed for trading on the NASDAQ national market and on the Tel Aviv Stock Exchange. This may result in price variations. Our ordinary shares are traded on these markets in different currencies, U.S. dollars on the NASDAQ and New Israeli Sheckels on the Tel Aviv Stock Exchange. These markets have different opening times and close on different days. Different trading times and differences in exchange rates, among other factors, may result in our shares being traded at a price differential on these two markets. In addition, market influences in one market may influence the price at which our shares are traded on the other.

We may be classified as a passive foreign investment company and, as a result, our U.S. shareholders may suffer adverse tax consequences.

Generally, if for any taxable year 75% or more of our gross income is passive income, or at least 50% of our assets are held for the production of, or produce, passive income, we may be characterized as a passive foreign investment company for U.S. federal income tax purposes. Our passive income would not include income derived from the sale of our products, but would include amounts derived by reason of a temporary investment of any cash amounts. This characterization could result in adverse U.S. tax consequences to our shareholders, including having gain realized on the sale of our shares be treated as ordinary income, as opposed to capital gain income, and having potentially punitive interest charges applied to such sales proceed. U.S. shareholders should consult with their own U.S. tax advisors with respect to the U.S. tax consequences of investing in our ordinary shares.

We believe that in 2002 we were not a passive foreign investment company and currently we expect that we will not be a passive foreign investment company in 2003. However, passive foreign income company status is determined as of the end of the full tax year and is dependent on a number of factors, including the value of a corporation s assets in the amount and type of its gross income. Therefore, there can be no assurances that we will not become a passive foreign investment company for the current fiscal year ending on December 31, 2003 or any future year. For a discussion on how we might be characterized as a passive foreign investment company and related tax consequences, please see the section of this annual report entitled U.S. Taxation Passive Foreign Investment Companies.

Item 4. Information on the Company

History and Development of the Company

Nova Measuring Instruments Ltd. was incorporated in May 1993 under the laws of the State of Israel. We commenced operations in October 1993 to design, develop and produce integrated process control systems for use in the manufacture of semiconductors. In October 1995, we began manufacturing and marketing systems for chemical mechanical polishing. We have since expanded our product offering to include systems designed for chemical vapor deposition, lithography and etch, and are continuing to develop new products and additional applications for our current products.

In April 2000, we conducted an initial public offering pursuant to which we sold 3,000,000 ordinary shares for consideration of $54 million and net proceeds of $49.2 million. In connection with the public offering, our shares were listed for trading on the NASDAQ National Market.

In June 2002, we listed our shares in the Tel-Aviv Stock Exchange in Israel, pursuant to legislation which enables Israeli companies whose shares are traded on certain stock exchanges outside of Israel, to be registered on the Tel Aviv Stock Exchange, while reporting, in substance, according to the provision of the relevant foreign securities law applicable to the company (Dual Listing). The Israeli securities laws prescribe that as condition precedent of a company being eligible to register its shares for trade on the Tel Aviv Stock Exchange, such company s capital should consist of a single class of shares with equal voting rights with respect their par value. Accordingly, all of our series E shares were converted into ordinary shares in May 2002 (this conversion was approved by the Tel Aviv District Court on May 2002) and our articles of association were amended accordingly.

We have four wholly owned subsidiaries in the United States, Japan, Taiwan and Netherlands. These subsidiaries are engaged in marketing activities and provide technical support to our customers.

Our main office, research and development and production facilities are located in Israel at Weizman Science Park, Building 22, 2nd Floor, Rehovot, 76100. Our telephone number at our main office is +1-972-8-938-7505. Our facilities occupy approximately 5,000 square meters. Our U.S. subsidiary leases approximately 600 square meters in Arizona for use as a marketing and support facility. Our Japanese subsidiary leases approximately 200 square meters for use as a marketing and service facility. Our Taiwanese subsidiary leases approximately 350 square meters for use as a service and demonstration facility.

Our agent for service of process in the United States is David Gitlin, of Wolf, Block, Schorr and Solis-Cohen LLP, 1650 Arch Street, 22nd Floor, Philadelphia PA 19103.

Business review

Overview

We design, develop and produce integrated process control systems used in the manufacture of semiconductors. Our products enable manufacturers to measure wafers immediately after the process steps while the wafers are inside the process equipment.

The semiconductor manufacturing process requires exacting steps and strict control of equipment performance and process sequences. Tight control can be achieved through monitoring wafers and measuring relevant parameters after each process step. Prior to the introduction of our systems, process control was achieved through stand-alone measurement equipment. This technique requires the semiconductor manufacturer to interrupt the process sequence, remove sample wafers from the process equipment and place them on the measuring or inspection tool. In contrast, our approach is based on patented measuring methods that enable us to produce optical measuring systems that are small enough to be integrated directly inside many types of process equipment in semiconductor manufacturing.

We supply our systems to major semiconductor manufacturers worldwide, either directly or through process equipment manufacturers. Semiconductor manufacturers using our systems comprise a large number of the top 20 semiconductor manufacturers in the world, including IBM, Infineon, Intel, Micron, Motorola, Philips, ST Microelectronics, Texas Instruments and UMC. Our process equipment manufacturer customers include Applied Materials, Ebara, Speedfam-IPEC and Strasbaugh. Our first systems were installed in 1995, and we have sold more than 950 systems worldwide. Our approach offers considerable advantages over the conventional approach to process control, enabling manufacturers using our equipment to reduce costs and to improve production efficiency, yield and quality.

The Nova Integrated Process Control Solution

We believe that our systems provide semiconductor manufacturers with more effective process control by measuring wafers thin films thickness and optical properties without removing the wafer from the process equipment. Our products are based on patented measuring methods that enable us to produce optical measuring systems that are small enough to be incorporated directly inside many types of equipment used in semiconductor processing. Our integrated systems measure the wafer within the actual process environment, reducing labor and wafer handling as well as the risk of contamination or damage to the wafer. In addition, we believe that our systems deliver significant increases in overall equipment efficiency as well as in wafer-to-wafer uniformity, with minimal operator intervention.

We believe that we provide our customers with flexible integrated process control solutions by offering systems that meet thin film measurement needs in critical applications in the fabrication process. Our integrated process control platform can be deployed to multiple processes and applications of semiconductor manufacturing.

Our systems can be installed directly in new equipment or used to upgrade existing equipment with minimal integration costs, extending the useful life of existing process equipment and saving significant capital costs. Our approach centered around our NovaReady integration package, allows process equipment manufacturers to prepare their equipment to accept our measurement and inspection systems, which can then be integrated with a simple plug-and-play installation.

We believe that our integrated process control systems provide several important advantages to semiconductor manufacturers, enabling manufacturers to:

- utilize the process equipment wafer handling system to allow measurement of the sample wafers while processing other wafers;
- perform the measurement without removing the wafer from the process equipment, increasing the efficiency of the process and decreasing the risk of contamination;

- reduce capital costs of the fabrication facility by increasing overall equipment efficiency and reducing labor costs and necessary clean room area; and

- reduce the amount of time required to qualify process equipment that is usually idle during qualification steps, thus minimizing costly equipment down-time.

Integrated Process Control throughout the Manufacturing Fab

Nova introduced the Integrated Metrology concept to the industry and is now offering integrated process control systems for the chemical mechanical polishing (CMP), chemical vapor deposition (CVD), and photolithography manufacturing processes.

The Company s integrated thickness monitoring (ITM) systems for CMP process control deliver a high degree of wafer-to-wafer closed loop control.

The NovaReady open architecture policy enables installation of integrated process control systems on all process equipment and delivers advanced Integrated Process Control for the entire fab along with the rapid advancement of the semiconductor manufacturing processes.

Nova s Open Architecture Policy

Nova has established OEM partnerships with the major CMP tool manufacturers. They make their systems NovaReady by finding on-tool space and providing wafer handling access and minimal wiring for the ITM system, which is a little larger than a wafer, with a small optical head that scans the wafers. Applied Materials, Ebara, Peter Wolters, SpeedFam-IPEC, Strasbaugh, and others have made their systems NovaReady, making the installation of Nova s ITM systems a simple plug-and-play process. Nova is strongly committed to its multi-vendor policy and is establishing relationships with different process equipment manufacturers for its new developments.

Products

Thin Film Process Control

Nova offers several models of its integrated thickness monitoring systems, depending on polisher type and end user requirements:

- **The NovaScan 840** combines high-speed measurement and effective handling, enabling measurement of wafers both before and after polishing. This system and prior generations were our main revenue source in 2001 and prior years.
- **The NovaScan 2020 and 2040** are the second generation of integrated thickness monitoring systems with enhanced spectral range, responding to the needs of the industry for emerging chemical mechanical polishing high-end applications of thin films and complex layer stacks. The 2020 model was introduced to the market in the end of 2000, and since then has replaced the NovaScan 840 and accounted for the major portion of our sales for 200mm production lines. The NovaScan 2040 was introduced in 2002 and is the fastest integrated film thickness 200mm measurement system in the market today.
- **The NovaScan 3000** system measures 300mm wafers and offers an efficient monitoring solution to wafer fabrication plants moving to 300mm manufacturing. The system was introduced to the market and started sales in 2001.
- **The NovaScan 3030 and 3060** are the second generation of the 300mm measuring system, with improved optics and motion system enabling high speed measurement, and with broad spectral rage (Ultra Violet to Infra Red) allowing accurate measurements on complex structures and thin film layers. The 3030 model was introduced to the market in 2001 and since then has replaced the NovaScan 3000 and accounts for the major portion of our sales for 300mm production lines. The NovaScan 3060 was introduced in 2002 and is the fastest integrated film thickness 300mm measurement system in the market today.
- **The NovaScan 2020Cu** has the same basic platform as the NovaScan 2040, with additional hardware and software improvements, enabling the system to answer the unique requirements of copper CMP monitoring. The system went through several beta tests during 2001 and 2002 and was released for sale in the beginning of 2003.

- **The NovaScan 3030Cu** has same basic platform as the NovaScan 3030, with additional hardware and software improvements, enabling the system to answer the unique requirements of 300mm copper CMP monitoring. The system went through field testing during 2002 and was released for sale in the beginning of 2003.
- **A closed loop control** option for the NovaScan systems delivers reliable, highly automated wafer-to-wafer uniformity over chemical mechanical polishing manufacturing processes. The thickness data of every processed wafer is obtained and process parameters are fed back to adjust the next wafer polish.

- **NovaNet** is a highly sophisticated computer network, connecting all NovaScan systems on a factory floor. The network is managed by a dedicated server, running with a proprietary software developed by Nova, and insuring safe recipe distribution and recipe integrity across the factory. The NovaNet also includes a report generator (NSA) that allows the creation of reports from all the systems connected and allow programmable cross sections.
- **The NovaScan 3030 CD** system is a Scatterometry-based system for profiling lines and trenches on 200mm and 300mm wafers. The system is in advanced stage of field-testing and is planned to be released toward the end of 2003.
- **The NovaScan 840CVD** system is an integrated vacuum measurement system, measuring different layers in the chemical vapor deposition process. Data can be fed forward to the chemical mechanical polishing process tool. Integration solutions are being developed for different process equipment both for 200mm and 300mm equipment. The system was introduced to the market in the end of 2000, several units had been sold, and is not expected to have high market potential.

Photolithography Process Control

- **The NovaTrack 2020** system is a dual-purpose Integrated Metrology and Stand Alone system for overlay registration measurement and macro defect inspection in the photolithography steps. The system is designed for integration on a photoresist track and as a stand-alone system for 200mm wafers. Both stand-alone and integrated models of the NovaTrack 2020 finished beta testing in the first quarter of 2003 and have been released for sale.
- **The NovaTrack 3030** system is a dual-purpose Integrated Metrology and Stand Alone system for overlay registration measurement and macro defect inspection in the photolithography steps. The system is designed for integration on a photoresist track and an as stand-alone for 300mm wafers. The stand-alone model is planned to be released for sale in the first quarter of 2004. The integrated model is ready for alpha testing on a 300mm track.

Customers, Sales and Marketing

Our two-pronged, integrated sales and marketing strategy involves marketing our products directly to semiconductor manufacturers in addition to process equipment manufacturers in order to create demand for our products. We believe that the pricing structure of our NovaReady integration package enables process equipment manufacturers to increase their margins, and that the quality of our systems can improve equipment yields, creating an incentive for process equipment manufacturers to promote our products to semiconductor manufacturers. At the same time, we believe that semiconductor manufacturers, eager to improve their own margins through increased factory throughput and yield improvements, will demand that the equipment they employ incorporate our integrated system. By marketing directly to end-users as well as to process equipment manufacturers, we are able to ensure that both parties are aware of the wide range of benefits that our products can deliver.

We have a diverse customer base in terms of both geographic location and types of integrated circuits manufactured. Our customers are located in different countries, including Japan, Korea, Singapore, Taiwan, Malaysia, the United States and Europe.

The table below lists some of the largest semiconductor manufacturers who have multiple installations of our systems in one or more sites. These users purchase our products either directly from us or from process equipment manufacturers.

Elpida	IBM
Infineon	Intel
Micron	Motorola
Phillips	Samsung
Texas Instruments	STMicroelectronics

To further enhance our marketing efforts, we have established a system of integrated sales and support activities with key process equipment manufacturers, including Applied Materials, Ebara, SpeedFam-IPEC and Strasbaugh. This allows us to provide comprehensive and long-term application support directly to semiconductor manufacturers. We expect to continue to add new process equipment manufacturers to our roster as we introduce new integrated process control systems that can be integrated with different types of equipment.

We seek to establish and maintain close and mutually beneficial relationships with our customers by consistently providing them with a high level of service, support and new capabilities. We have established a global network of direct sales and marketing, customer service and applications support offices. We maintain sales, service or applications offices in Europe, Israel, Japan, Korea, Singapore, Taiwan and the United States, with a total staff of 70 people. These offices provide highly qualified application support specialists, training to process equipment manufacturer customers and end-users, marketing, demonstrations and evaluations, spare parts hubs and sales and support engineers.

The below table describes the distribution of our revenues by geographic areas:

	Year ended December 31,		
	2002	2001	2000
	(in thousands)		
USA	12,426	15,243	34,409
Europe	3,259	2,752	5,816
Japan	4,074	1,694	969
Other	611	1,482	7,269
Total	20,371	21,171	48,463

Research and Development

We have assembled a core team of experienced scientists and engineers who are highly skilled in their particular field or discipline. Our research and development core competencies, technologies and disciplines are comprised of spectrophotometry, ellipsometry, scatterometry, image acquisition, pattern recognition, inspection and automatic defect classification.

The new integrated process control market is characterized by continuous technological development and product innovations. We believe that the rapid and ongoing development of new products and enhancements to our existing product line is critical to our success. Accordingly, we devote a significant portion of our technical, management and financial resources to developing new applications and emerging technologies. At December 31, 2002, our management and research and development staff was comprised of 86 persons, including independent contractors, of whom 28 held Ph.D. degrees and 29 held M.S. degrees.

Our research and development operations received the ISO 9001 quality mark by an international certification institute in June 2000.

Intellectual Property

Our success depends in part upon our ability to protect our intellectual property. We have been granted 33 U.S. and non-U.S. patents and hold an exclusive license to one U.S. patent. The U.S. patents we own have expiration dates ranging from 2013 to 2020. We also have 99 pending regular and provisional patent applications pending in the United States and other countries. Our patents and applications principally cover various aspects of optical methods, optomechanical and mechanical algorithms, and integrated process control implementation concepts.

To protect our proprietary rights, we also rely on a combination of copyrights, trademarks, trade secret laws, contractual provisions and licenses. We also enter into confidentiality agreements with our employees and some of our consultants and customers, and seek to control access to and distribution of our proprietary information.

In 1998, Intel Corporation (Intel), a major customer and former shareholder, notified us that a lawsuit had been filed against a number of semiconductor manufacturers, including Intel, by the Lemelson Medical Education and Research Foundation. The suit alleges that these semiconductor manufacturers have infringed upon U.S. Patents owned by Lemelson. Our standard product sales agreement with our customers provides that we will indemnify our customers against losses and will assume responsibility for defending any lawsuit against them asserting patent infringement claims based upon the use of our products. In their 1998 letter, Intel requested that we defend, indemnify and hold it harmless against the Lamelson claim to the extent such claim results from the use of the products we sold to Intel. We have yet to conclude that such claim results from the use of our products and, to date, have not undertaken such defense nor have agreed to indemnify and hold Intel harmless with respect to such claim.

For additional information regarding intellectual property, see Item 3 Risk Factors.

Contracts

In February 2002, we signed a joint development agreement with Applied Materials relating to integrated metrology for Copper CMP processing. Pursuant to this agreement, we hope to develop copper CMP monitoring capabilities using the NovaScan 2020/3030 Cu, which could be sold to Applied Materials and its customers.

In February 2002, we signed a licensing agreement with Lucent Technologies Inc. (Lucent) according to which we were licensed the rights to certain of Lucent s patents, software and technical information. In connection with the agreement entered into with Lucent we also signed an agreement with Agere Systems Guardian Corporation (Agere) according to which we were granted a license in a patent owned by Agere. Pursuant to this agreement, as well as the agreement entered into with Lucent, we hope to develop new metrology products and technologies for the semiconductors industry.

Manufacturing

In order to leverage the relatively high volume of integrated systems we manufacture and to decrease production costs, we continue to focus our internal manufacturing activities on processes that add significant value or require unique technology or specialized knowledge and outsource others.

Our principal manufacturing activities include assembly, integration, final test and calibration. Our production activities are conducted in our manufacturing and service facility in Israel. We rely and expect to continue to rely on subcontractors and turnkey suppliers to fabricate components, build assemblies and perform other non-core activities in a cost-effective manner. While we use standard components and subassemblies wherever possible, most mechanical parts, metal fabrications and critical components used in our products are engineered and manufactured to our specifications. A small portion of these components and subassemblies are obtained from a limited group of suppliers, and occasionally from a single source supplier. Our manufacturing operations received the ISO 9002 quality mark by an international certification institute in October 1999.

Capital expenditures

See Item 5 - Liquidity and Capital Resources.

Property, Plants and Equipment

Our capital expenditures are primarily for network infrastructure, computer hardware and software, leasehold improvements of our facilities and system demonstration tools. None of these assets are held as collateral or guarantee other obligations. We believe that our facilities and equipment are in good operating condition and adequate for their present usage.

In January 2002, we relocated our main office, research and development and production facilities. These facilities, located in Rehovot, Israel, occupy approximately 5,000 square meters, including: approximately 800 square meters of production facilities, approximately 3,000 square meters of research and development offices (including approximately 300 square meters of laboratories) and approximately 1,200 square meters of headquarters, sales and marketing, service and support and administration facilities. Originally, the new facilities were planned to be approximately 8,000 square meters. However, due to the change in market conditions, we reduced this office space. Due to the breach of part of our lease commitments associated with the move to the new building, we incurred costs of approximately $1 million. Our current lease commitment relating to the new building is until the end of 2007.

Our U.S. subsidiary leases approximately 600 square meters in Arizona for use as a marketing and service support facility. Our Japanese subsidiary leases approximately 200 square meters for use as a marketing and service support facility. Our Taiwanese subsidiary leases approximately 350 square meters for use as a service and demonstration facility.

Competition

The market for semiconductor capital equipment is highly competitive. Our current integrated products principally compete with products manufactured by Nanometrics. To the best of our knowledge, Dai Nippon Screen has ceased its activities in integrated metrology. Nanometrics had a non-exclusive arrangement with Applied Materials, which we believe prevented Nanometrics from selling to other customers. This

agreement expired. We currently sell more systems to Applied Materials than Nanometrics, but we anticipate that Noanometrics will start to work with other CMP equipment manufacturers. We have entered into strategic alliance with Applied Materials for process control of Copper CMP processing.

In the photolithography area, for overlay measurement and macro inspection, we expect to see competition from KLA-Tencor Corp., Therma-Wave Inc. and Rudolph Technologies Inc., though we are not aware of any released integrated products by these companies. In the photolithography and etch area, for optical critical dimension measurement we expect to compete with KLA-Tencor Corp., Therma-Wave Inc., Accent Technologies Inc. and Nanometrics Inc.

Significant competitive factors in the market for integrated process control systems include technological leadership, system performance, ease of use, reliability, cost of ownership, technical support and customer relationships, along with an adequate business model, internal organization and unique process equipment manufacturer agreements and partnerships. We believe we compete favorably on the basis of these factors in the markets we serve.

Subsidiaries

Our subsidiaries and the countries of their incorporation are as follows:

Name of subsidiary	Country of incorporation
Nova Measuring Instruments Inc.	Delaware, USA
Nova Measuring Instruments K.K	Japan
Nova Measuring Instruments Taiwan Ltd.	Taiwan
Nova Measuring Instruments Netherlands B.V	Netherlands

Item 5. Operating and Financial Review and Prospects

Critical Accounting Policies

Management believes the following critical accounting policies, among others, affect its more significant judgments and estimates used in the preparation of its consolidated financial statements.

Use of estimates General

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

Revenue recognition

The Company recognizes revenues upon the shipment of its products to the customer or provision of support service, provided that persuasive evidence of an arrangement exists, title has transferred, the price is fixed, collection of resulting receivables is probable and there are no remaining significant obligations.

Adequate provision is made, upon shipment, for estimated product returns and warranties. When transactions involve newly introduced products or when customers specify acceptance criteria that cannot be demonstrated prior to the shipment, we defer the relevant revenues. We currently anticipate introducing several new systems in fiscal 2003. Delays in introducing a product or delays in our ability to obtain customer acceptance, will delay the recognition of revenue and gross profit by us.

Allowances for doubtful accounts

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

Warranty provisions

We provide for the estimated cost of product warranties at the time revenue is recognized. While we are engaged in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers, our warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure at home or at customer sites. Should actual product failure rates, material usage or service delivery costs differ from our estimates, and revisions to the estimated warranty liability may be required.

Inventories write-down

We value our inventory at the lower of the actual cost or the current estimated market value of the inventory. We regularly review inventory quantities on hand and record a provision for excess and obsolete inventory based primarily on our estimated forecast of product demand and production requirements for the next twelve months. As demonstrated during 2000 and 2001, demand for our products can fluctuate significantly. A significant increase in the demand for our products could result in a short-term increase in inventory purchases while a significant decrease in demand could result in an increase in the amount of excess inventory quantities on hand. In addition, our industry is characterized by rapid technological change, frequent new product development, and rapid product obsolescence that could result in an increase in the amount of obsolete inventory quantities on hand. Additionally, our estimates of future product demand may prove to be inaccurate, in which case we may have understated or overstated the provision required for excess and obsolete inventory. In the future, if our inventory is determined to be overvalued, we would be required to recognize such costs in our cost of goods sold at the time of such determination. Likewise, if our inventory is determined to be undervalued, we may have over-reported our costs of goods sold in previous periods and would be required to recognize such additional operating income at the time of sale. Therefore, although we make every effort to ensure the accuracy of our forecasts of future product demand, any significant unanticipated changes in demand or technological developments could have a significant impact on the value of our inventory and our reported operating results.

Operating results

Overview

A significant portion of our revenues historically has been derived from customers in the United States, and we expect that this trend will continue, although we expect that U.S. sales as a percentage of total sales may decrease as our total sales and sales to other geographic areas, particularly Asia, increase. In 1999, 71% of our revenues were derived from U.S. customers, 12% were from European customers, including 5% from Italian customers, 2% were from Japanese customers and 15% were from Singaporean customers. In 2000, 71% of our revenues were derived from U.S. customers, 12% were from European customers, 2% were from Japanese customers and 15% were from Asian customers, including 5% from South Korean customers. In 2001, 72% of our revenues were derived from U.S. customers, 8% were from Japanese customers, 13% were from European customers and 7% were from Asian (other than Japanese) customers. In 2002, 61% of our revenues were derived from U.S. customers, 20% were from Japanese customers, 16% were from European customers and 3% were from Asian (other than Japanese) customers.

Historically, a substantial portion of our revenues has come from a small number of customers. For example, in 2002 and 2001 and 2000, our five largest customers accounted for 86% and 81% and 66% of our revenues, respectively. In 2002 and 2001 and 2000, our single largest customer accounted for 29% and 33% and 21% of our revenues, respectively. We anticipate that our revenues will continue to depend on a limited number of major customers, although the companies considered to be major customers and the percentage of our revenue represented by each major customer may vary from period to period.

The sale cycle for our systems typically ranges from three to 24 months and relies upon the integration status with a specific process equipment, manufacturer and model, the evaluation criteria of our customers, and the technology or application of the process. Additionally, the rate and timing of customer orders may vary significantly from month to month as a function of the introduction of a new type of system to our production line. We have a relatively low backlog. Accordingly, if sales of our products do not occur when we expect, and we are unable to adjust our estimates on a timely basis, our expenses and inventory levels may fluctuate relative to revenues and total assets.

We schedule production of our systems based upon order backlog and customer forecasts. We include in backlog only those orders to which the customer has assigned a purchase order number and for which delivery has been specified within 12 months. Because shipment dates may be changed and customers may cancel or delay orders with little or no penalty, our backlog as of any particular date may not be a reliable indicator of actual sales for any succeeding period. We do not maintain any reserves for cancellations or variations in our customers orders

because historically cancellations and variations have been insignificant. In addition, if a cancellation occurs, we may be able to sell the equipment to other customers.

During 2002, the Company went through reorganization, including consolidation of the company s different integrated metrology products into two major product divisions (Thin Films and Lithography).

Overall, according to DataQuest April 2003 published research, the semiconductor wafer front-end equipment (WFE) industry has declined by 32% in 2002, following a 29% decline in 2001. By comparison, Nova revenues declined 4% in 2002 and 56% in 2001.

The following table shows the relationship, expressed as a percentage, of the listed items from our consolidated statements of operations to our total revenues for the periods indicated:

	Percentage of Total Revenues Year ended December 31,		
	2002	**2001**	**2000**
Consolidated Statements of Operations Data:			
Revenues from products sale	71.2%	69.6%	86.5%
Revenues from services	28.8%	30.4%	13.5%
Total revenues	100.0%	100.0%	100.0%
Cost of products sale	33.1	43.3	36.2
Cost of services	32.4	34.5	12.2
Total cost of revenues	65.5	77.8	48.4
Gross profit	34.5	22.2	51.6
Operating expenses:			
Research and development expenses, net	48.6	62.6	28.6
Sales and marketing expenses	34.1	32.4	16.5
General and administrative expenses	8.8	14.3	6.6
Other operating expenses	7.3	4.8	--
Total operating expenses	98.8	114.1	51.7
Operating income (loss)	(64.3)	(91.9)	(0.1)
Financing income, net	0.7	12.2	5.8
Net income (loss)	(63.6)%	(79.7)%	5.7%

Comparison of Years Ended December 31, 2002 and 2001

Revenues. Our revenues in 2002 decreased $0.8 million, or 3.8%, compared to 2001. This decrease resulted from the continuing deep slowdown in the semiconductor industry in 2002. Revenues from services in 2002 accounted for 28.8% of total sales, as compared to 30.4% in 2001. The decrease in revenues was attributed mainly to decrease in the quantities of systems sold.

We expect that sales from our main integrated process control product line targeting the chemical mechanical polishing market will continue to account for a substantial portion of our future revenues for at least the next year, and that the new product lines sales (process control systems for lithography and etch) will gradually become more significant.

Cost of Revenues and Gross Profit. Cost of revenues consists of the labor, material and overhead costs of manufacturing our systems, and the costs associated with our worldwide service and support infrastructure. It also consists of inventory write-offs and the provision for estimated future warranty costs for systems we have sold. Our gross profit increased 49.3% from $4.7 million in 2001 to $7.0 million in 2002. Our gross

profit represented 22.2% and 34.5% of our revenues in 2001 and 2002, respectively. Our gross profits increase from 2001 to 2002 is attributed to cost reduction measures and adjustments to our manufacturing and service and support operations to make them more compatible with current sales levels. The cost reduction measures taken during 2002 are related to the deep slowdown of the semiconductor industry.

Costs related to 2002 services decreased $0.7 million, or 9.5% as compared to 2001 following the implementation of a cost-reduction plan. Revenues related to services decrease $0.6 million in 2002 compare to 2001. Due to the cost reduction plan, the loss related to services decreased by $0.2 million and we recorded a gross loss of $0.7 million in 2002, as compared to a gross loss of $0.9 million in 2001.

Research and Development, Net. Research and development expenses consist primarily of salaries and related expenses and also include consulting fees, subcontracting, related materials and overhead expenses, after offsetting conditional grants received or receivable from the Office of the Chief Scientist. Our research and development expenses, net, decreased 25.3% from $13.3 million in 2001 to $9.9 million in 2002, after offsetting conditional grants received or receivable from the Office of the Chief Scientist of $1.8 million and $1.7 million in 2001 and 2002, respectively. This decrease is attributed mainly to the cost reduction steps, that had been taken in 2001 and 2002, including significant work-force reductions. We do not expect the work-force reductions to adversely impact our major development plans and the introduction of new products. Research and development expenses, net, represented 48.6% and 62.6%, respectively, of our revenues in 2002 and 2001. Approximately $5 million of our research and development expenses, net, in 2002, resulted from our research and development efforts relating to the introduction of new product lines in order to maintain our position as a market leader in integrated process control equipment.

Sales and Marketing. Sales and marketing expenses are comprised of salaries and related costs for sales and marketing personnel, related travel expenses, and overhead. They also include commissions to our representatives and sales personnel and royalties. Our sales and marketing expenses increased 1.4% from $6.9 million in 2001 to $7.0 million in 2002. Sales and marketing expenses represented 32.4% and 34.1%, respectively, of our revenues in 2001 and 2002.

General and Administrative. General and administrative expenses are comprised of salaries and related expenses and other non-personnel related expenses. Our general and administrative expenses decreased 40.7% from $3.0 million in 2001 to $1.8 million in 2002. This decrease is attributed mainly to the cost reduction actions take during 2001 and 2002, which included reduction in work-force. General and administrative expenses represented 14.3% and 8.8%, respectively, of our revenues in 2001 and 2002.

Other Operating Expenses. In 2002 the company purchased technology for use in research and development for $1.5 million. Such amount has been charged to the statement of operations in the year ended December 31, 2002 in accordance with the principals set force in SFAS 2. Other operating expenses in 2001 of $1.0 million are comprised of a non-recurring expenses related to the breach of part of our operating lease commitments associated with the move to the new building.

Comparison of Years Ended December 31, 2001 and 2000

Revenues. Our revenues in 2001 decreased $27.3 million, or 56.3%, compared to 2000. This decrease is attributed to the decrease in the volume of systems sold from our main integrated process control product line targeting the chemical mechanical polishing market, resulting from the deep slowdown of the semiconductor industry in 2001. Revenues from services accounted for 30.4% of total sales, as compared to 13.5% in 2000. This increase is attributed to the reduction of 64.9% in 2001 revenues from products compared to 2000.

Cost of Revenues and Gross Profit. Cost of revenues consists of the labor, material and overhead costs of manufacturing our systems, and the costs associated with our worldwide service and support infrastructure. It also consists of inventory write-offs and the provision for estimated future warranty costs for systems we have sold. Our gross profit decreased 81.2% from $25.0 million in 2000 to $4.7 million in 2001. Our gross profit represented 51.6% and 22.2% of our revenues in 2000 and 2001, respectively. Our gross profits decrease from 2000 to 2001 is attributed to the fixed costs of our service and support organization (12.2% of total revenues in 2000 as compared to 34.5% of total revenues in 2001), and to a $2.2 million inventory write-off (10.4% of total revenues of 2001) related to the deep slowdown of the semiconductor industry.

Costs related to 2001 services increased 23.2% as compared to 2000. On a quarterly basis, costs related to Q4-2001 services decreased 24.0% as compared to Q4-2000, following the implementation of a cost-reduction plan. Due to the decrease in revenues related to services, we recorded a gross loss of $0.9 million in 2001, as compared to a gross profit of $0.6 million in 2000.

Research and Development, Net. Research and development expenses consist primarily of salaries and related expenses and also include consulting fees, subcontracting, related materials and overhead expenses, after offsetting conditional grants received or receivable from the Office of the Chief Scientist. Our research and development expenses, net, decreased 4.5% from $13.9 million in 2000 to $13.3 million in 2001,

after offsetting conditional grants received or receivable from the Office of the Chief Scientist of $2.0 million and $1.8 million in 2000 and 2001, respectively. Research and development expenses, net, represented 62.6% and 28.6%, respectively, of our revenues in 2001 and 2000. Approximately $6 million of our research and development expenses, net, in 2001, resulted from our research and development efforts relating to the introduction of new product lines in order to maintain our position as a market leader in integrated process control equipment.

Sales and Marketing. Sales and marketing expenses are comprised of salaries and related costs for sales and marketing personnel, related travel expenses, and overhead. They also include recorded royalties payable to the Office of the Chief Scientist and commissions to our representatives and sales personnel. Our sales and marketing expenses decreased 14.3% from $8.0 million in 2000 to $6.9 million in 2001. Sales and marketing expenses represented 16.5% and 32.4%, respectively, of our revenues in 2000 and 2001.

General and Administrative. General and administrative expenses are comprised of salaries and related expenses and other non-personnel related expenses. Our general and administrative expenses decreased 4.8% from $3.2 million in 2000 to $3.0 million in 2001. General and administrative expenses represented 6.6% and 14.3%, respectively, of our revenues in 2000 and 2001.

Other Operating Expenses. Other operating expenses in 2001 are comprised of a non-recurring expenses related to the breach of part of our operating lease commitments associated with the move to the new building.

Liquidity and Capital Resources

As of December 31, 2002, we had working capital of $34.6 million compared to working capital of $45.5 million as of December 31, 2001. This decrease is attributed primarily to our operating losses incurred during 2002. Cash and cash equivalents, short-term deposits and securities held to maturity as of December 31, 2002 were $38.5 million compared to cash and cash equivalents, marketable securities available for sale and securities held to maturity of $48.7 million as of December 31, 2001.

Trade accounts receivables increased from $1.7 million in December 31, 2001 to $2.7 million in December 31, 2002. This increase was due to the increase in our sales during the fourth quarter of 2002 (2002 fourth quarter revenues were $5.6 million compared to $4.0 million in the first quarter of 2002).

Operating activities in 2002 used cash of $7.9 million compared to cash of $5.7 million used in 2001 and compared to cash of $3.7 million used in 2000. Operating activities in 2002 used more cash relative to 2001 mainly due to our net losses in 2002.

The following table describes our investments in capital expenditures during the last three years:

	2002		2001		2000	
	Home	Abroad	Home	Abroad	Home	Abroad
	(in dollar thousands)					
Electronic equipment	300	30	397	32	589	103
Office furniture and equipment	5	0	14	69	18	69
Leasehold improvements	220	46	564	65	326	65
Total	525	76	975	166	933	237

The decrease in capital expenditures for leasehold improvements in 2002 was due to our completion of our 2001 investment in new facilities in Israel. Although we currently have no significant capital commitments, we expect to spend approximately $0.8 million on capital expenditures in the next 12 months, mainly for electronic equipment.

We are currently engaged in long-term commitments for the lease of our new building in Israel (until 2007) and for lease of vehicles (the latest of which ends in 2005). As for the amounts related to these lease commitments, see notes 7B and 7C to the consolidated financial statements.

Our principal liquidity requirements are expected to be for working capital, research and development, capital expenditures and lease payments for our worldwide facilities. We believe that our current cash reserves and expected cash flow will be adequate to fund our activities for at least the next 12 months.

Our long-term capital requirements will be affected by many factors, including the success of our current products, our ability to enhance our current products and to develop and introduce new products that will be accepted by the semiconductor industry. We plan to finance our long-term capital needs with the remaining net proceeds of our initial public offering, together with cash flow from operations, if any. If these funds are insufficient to finance our activities, we will have to raise additional funds through the issuance of additional equity or debt securities, through borrowing or through other means. We cannot assure you that additional financing will be available on acceptable terms.

With regard to usage of hedging financial instruments see Item 11 Quantitative and Qualitative Disclosures About Market Risk .

Impact of Inflation and Currency Fluctuation

Substantially all of our sales are made in U.S. dollars. Over 50% of our expenses in 2001 were in dollars or in NIS linked to the dollar. Most of the remaining expenses were in NIS. The dollar cost of our operations in Israel is influenced by any increase and the timing of such increase, in the rate of inflation in Israel that is not offset by the devaluation of the NIS in relation to the dollar with respect to such expenses that might increase as a result of inflation in Israel. During 2002, the value of the NIS decreased against the dollar by 7.3%, while the consumer price index in Israel increased by 6.5%. During 2001, the value of the NIS decreased against the dollar by 9.3%, while the consumer price index in Israel increased by 1.4%. During 2000, the value of the NIS decreased against the dollar by 2.7%, while the consumer price index in Israel did not change. We believe that the rate of inflation in Israel has had a minor effect on our business to date. However, our dollar costs in Israel will increase if inflation in Israel exceeds the devaluation of the NIS against the dollar or if the timing of this devaluation lags behind inflation in Israel. As of December 31, 2002, the majority of our net monetary assets were denominated in dollars and the remainder was denominated mainly in NIS. Net monetary assets that are not denominated in dollars or dollar-linked NIS are affected by the risk of currency fluctuations.

Conditional Grants from the Office of the Chief Scientist

Under the Law for the Encouragement of Industrial Research and Development, 1984, a qualifying research and development program is eligible for conditional grants of up to 50% of the program s expenses. The program must be approved by a committee of the Office of the Chief Scientist of the Israeli Ministry of Industry and Trade. The recipient of the conditional grants is required to return the grants by the payment of royalties on the revenues derived from using the grants. Current regulations promulgated under the law provide for the payment of royalties to the Office of the Chief Scientist ranging from 3% to 6% on the revenues derived from using the conditional grants until 100% of the grants are repaid. Conditional grants received under programs approved after January 1, 1999 will accrue interest at an annual rate of 12-month LIBOR applicable to dollar deposits. Royalties are paid in NIS linked to the dollar at the exchange rate in effect at the time of payment. Following the full payment of such royalties and interest, there is generally no further liability for payment.

The terms of the conditional grants under the law require that we manufacture in Israel the products developed with these grants. These restrictions apply even after grants are fully repaid. Under the regulations promulgated under the law, the products may be manufactured outside Israel by us or by another entity, if prior approval is received from the Office of the Chief Scientist. Ordinarily, as a condition to obtaining this approval, we would be required to pay increased royalties. If we perform the manufacturing, the increased royalties would ordinarily be one percentage point above the otherwise applicable royalty rate. If the manufacturing is performed by an entity other than us, the rate would depend on the amount of manufacturing performed outside of Israel and the size of the conditional grants in relation to the investments made by us in the project. The total amount to be repaid to the Office of the Chief Scientist would also be adjusted to between 120% and 300% of the conditional grants, depending on the manufacturing volume that is performed outside Israel. We may not transfer the technology developed with funds from these conditional grants to third parties without the prior approval of a governmental committee. Approval of the transfer of technology may be granted only if the recipient abides by all the provisions of the law and related regulations, including the restrictions on the transfer of know-how out side of Israel and the obligation to pay royalties in an amount that may be increased. Approval to manufacture products outside of Israel or consent to the transfer of technology, if requested, might not be granted.

As of December 31, 2002 we received conditional grants from the Office of the Chief Scientist totaling $5.8 million. Because the implementation of regulations raising royalty rates to between 3% and 6% has been deferred, we are obligated to pay royalties of 3% of revenues derived from sales of products funded with these grants. As of December 31, 2002, our contingent liability to the Office of the Chief Scientist for conditional grants received was approximately $0.7 million.

The funds available for Office of the Chief Scientist conditional grants were reduced for 2000, and the Israeli authorities have indicated that the government may further reduce or abolish Office of the Chief Scientist grants in the future. Even if these conditional grants are maintained, we might not receive Office of the Chief Scientist grants in the future and cannot presently predict what would be the amounts of grants we might receive.

In addition to royalty-bearing grants from the Office of Chief Scientist, in 2002, we participated in two programs sponsored by the Office of Chief Scientist. In one program, we are a member of a research consortium comprised of several Israeli high technology companies, which are engaged in the development of multimedia on-line technology. In the other program, we are cooperating with a research institute in Israel for the development of advance measurement techniques. In both programs, the Office of Chief Scientist contributes 66% of the approved research and development budget for the research consortium and the members of the research consortium contribute the remaining 34%. No royalties from this funding are payable to the Israeli government. Expenses in excess of the approved budget are borne by the consortium members. In general, any consortium member that develops technology as part of the consortium retains the intellectual property rights to the technology developed by this member, and all the members of the consortium have the right to utilize and implement such technology without having to pay royalties to the developing consortium member. As of December 31, 2002, we had received approximately $1 million in grants from the Office of Chief Scientist in connection with the above-mentioned programs.

Political and economic conditions in Israel

The Company is incorporated under the laws of Israel, and has its offices and manufacturing facilities in Israel. The Company is, therefore, directly influenced by the political, economic and military conditions affecting Israel. Any major hostilities involving Israel, the interruption or curtailment of trade between Israel and its trading partners or a significant downturn in the economic or financial condition of Israel could have a material adverse effect on the Company s business, financial condition and results of operations.

Political Conditions. Since the establishment of the state of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors and a state of hostility, varying from time in intensity and degree, has led to security and economic problems for Israel. However, a peace agreement between Israel and Egypt was signed in 1979, a peace agreement between Israel and Jordan was signed in 1994 and, since 1993, several agreements between Israel and the Palestinian Authority representatives have been signed. As of the date hereof, Israel has not entered into any agreement with Syria or Lebanon. Currently there is stagnation in the peace process in the Middle East and ongoing hostilities between the Palestinian Authority and Israel. The resumption of hostilities in the region, which have occurred after the failure of Camp David peace talks, as well as the events of September 11, 2001, and the intensification of such hostilities in recent months, has a negative effect on the stability of the region. There can be no assurance as to whether or how the peace process will develop or what affect it or these ongoing hostilities may have upon the Company.

Beginning in 1948, nearly all Arab countries have formally adhered to a boycott of Israel and Israeli companies and, since the early 1950s, of non-Israeli companies doing business in Israel or with Israeli companies. Attempts to ensure that Arab countries are complying with this boycott have intensified due to recent hostilities between the State of Israel and the Palestinians. Despite measures to counteract the boycott, including anti-boycott legislation in the US, the boycott has had an indeterminate negative effect upon trade with and foreign investments in Israel. Although in the past such attempts did not materially affect us, there can be no assurance that restrictive laws, policies, or practices directed toward Israel or Israeli businesses will not have an adverse impact on the operation or expansion of the Company s businesses.

Due to recent presence of the Israeli military in the territories previously transferred to the control of the Palestinian authority, there were certain initiatives within the institutions of the European Union to suspend the trade agreements entered into between the State of Israel and members of the European Union. These initiatives culminated in a resolution of the European Parliament recommending that the European Union members suspend those trade agreements. It is uncertain whether such agreements will in fact be suspended, but if such agreements are suspended, it is likely to adversely affect the Company.

Military Service. Generally, all male adult citizens and permanent residents of Israel under the age of 48 are, unless exempt, obligated to perform up to approximately 45 days of military reserve duty annually. Additionally, all such residents are subject to being called to active duty at any time under emergency circumstances. Some of the Company s officers and employees are currently obligated to perform annual reserve duty. While the Company has operated effectively under these requirements since it began operations, no assessment can be made as to the full impact of such requirements on the Company s workforce or business if conditions should change, and no prediction can be made as to the effect on Company of any expansion or reduction of such obligations.

Economic conditions. Israel s economy has been subject to numerous destabilizing factors, including a period of rampant inflation in the early to mid-1980s that reached an annual peak of 445%, low foreign exchange reserves, fluctuations in world commodity prices, military conflicts and civil unrest. In the past three years, the Israeli economy has been in a recession. From 1997 through 2002, Israel s GDP increased 3.3%, 2.4%, 2.3%, 6.0%, 2.5% and 6.5%, respectively. The Israeli government has, for these and other reasons, intervened in the economy by utilizing, among other means, fiscal and monetary policies, import duties, foreign currency restrictions and control of wages, prices and exchange rates. The Israeli government periodically changes its policies in all these areas.

Trend Information

During 2001 and 2002 the Company has been adversely affected by the general slowdown in the semiconductor equipment market, and its financial results reflect this slowdown. During 2001 and 2002 the Company implemented a cost-reduction plan, which included a 30% reduction in work force, salary cutback and expense controls. The Company is unable to predict the length and severity of this slowdown.

Item 6. Directors, Senior Management and Employees

At the end of 2002, the Company went through an internal reorganization. These changes are reflected in the following list of officers and directors:

Name	Age	Position
Barry Cox (1) *	63	Chairman of the Board of Directors
Giora Dishon	59	President, Chief Executive Officer, Director and Co-Founder
Moshe Finarov	51	Vice President, Chief Technology Officer, Director and Co-Founder
Chai Toren *	47	Vice President, Chief Financial Officer
Gad Yaron *	52	Vice President, Chief Operational Officer
Ronen Frish *	46	Vice President, Sales and Marketing
Meir Shannie (2) *	58	Director
Adam Feit (3) *	56	Director
Avi Kerbs *	56	Director
Joseph Ciechanover *	71	Director
Alon Dumanis (4) *	60	Director
Lauri Hanover	43	External Director
Karrey Holland	47	External Director

* Each one of these persons beneficially owns less than one percent of the Company s ordinary shares.

(1) Was appointed as Chairman in May 2003.
(2) Resigned from office in June 2003.
(3) Resigned from office in August 2002.
(4) Was appointed as Director in October 2002.

Our directors (other than the external directors) serve as such until the Company s next annual general meeting of shareholders. Our external directors, in accordance with Israeli law, serve for a three year term, which may be renewed for only one additional three year term. All of our outside directors were elected in 2000.

Barry L. Cox was appointed chairman of the Board of Directors of the Company in May, 2003. During the years 2001 to 2002 Mr. Cox served as chairman of the board of directors of MorphICs Technology Inc. and from 1998 to 2000, as chairman of the board of directors of Quantum Effect Devices Inc. Mr. Cox served as chief executive officer of Weitek Corporation between 1993 and 1995, and before that filled various roles in Intel the last of which was president of Intel Europe. Mr. Cox hold a B.S. in engineering from the U.S. Air Force Academy and an MBA from Boston University.

Mr. Giora Dishon is a co-founder of Nova and has served as President and Chief Executive Officer since Nova s formation in 1993. From 1989 to 1993 he served as Thin Film and Flat Panel Display Product Line Manager at Orbot Systems and Orbotech Ltd., a manufacturer of automated optical inspection equipment. From 1986 to 1988 he was a Visiting Scientist at the Microelectronics Center of North Carolina, and from 1982 to 1986 he served as the Managing Director at AVX Israel Ltd., a manufacturer of electronic devices. Dr. Dishon holds a B.Sc. in Chemistry, an M.Sc. and a Ph.D. in Materials Science from the Hebrew University in Jerusalem.

Mr. Moshe Finarov is a co-founder of Nova and a member of the board of directors. He has served as Chief Technology Officer of Nova since Nova s formation in 1993 . From 1989 to 1993 he served as Senior Physicist at Orbotech and from 1978 to 1988 he was employed at the ENIMS and PULSAR Institutes of Research in Moscow. Dr. Finarov holds a Ph.D. in Semiconductor Physics from Moscow University.

Mr.Chai Toren has served as Chief Financial Officer of Nova since 1995. From 1994 to 1995 Mr. Toren served as Chief Financial Officer of Zar Laboratories, a biotechnology company. From 1989 to 1994, he was employed as Project Manager of the Jerusalem Foundation, a non-profit organization. Mr. Toren holds a B.A. in Economics and Business Administration from the Hebrew University in Jerusalem.

Mr. Gad Yaron was appointed as Nova s Chief Operational Officer in October 2002, and has served as Nova s Lithography Product Line Manager since 2000. From 1998 to 2000 he was New Applications Manager. From 1997 to 1998 he served as Director of Yield Management at Applied Materials Israel, a subsidiary of Applied Materials Inc. From 1988 to 1997 he served in various key engineering management positions at Intel Electronics Ltd. Dr. Yaron holds a Ph.D. in Experimental Semiconductor Physics from the Hebrew University in Jerusalem.

Mr. Ronen Frish has served as Vice President, Sales and Marketing of Nova since 1995. From 1993 to 1995, Mr. Frish served as Sales Manager at Digital Equipment Israel, a computer manufacturer. From 1987 to 1993 he held various sales and marketing management positions in Israel and in Europe at Orbot Systems and Orbotech. From 1981 to 1987 he served as a project manager at AREL Electronics. Mr. Frish holds a B.Sc. in Business Management from the Hebrew University in Jerusalem.

Mr. Avi Kerbs has served as a director of Nova since 1993. He has served and continue to serve as president and chief executive officer of Teuza Management and Development Ltd., the management company of Teuza-A Fairchild Technology Venture Ltd., a venture capital company, since 1991. He has served as a director of most of the companies comprising the investment portfolio of the Teuza Fund. Mr. Kerbs is also a director of DSSI INC. currently traded on NASDAQ SMALLCAP market and in two other Israeli companies. Mr. Kerbs holds a B.Sc. in Industrial Engineering and Management and an M.Sc. in Management, both from the Technion in Haifa-the Technology Institute of Israel. Mr. Kerbs was originally appointed to our board of directors by Teuza.

Mr. Joseph Ciechanover has served as a director of Nova from October 1996 until December 1998 and again from February 2000 until the present. He is the founder and president of the Challenge Fund-Etgar L.P., a venture capital firm and served as chairman of the board of El-Al Israel Airlines from 1995 until 2001. He served as a member of the advisory committee of the Bank of Israel from 1980 to 1994 and the president and a member of the board of directors of PEC Israel Economic Corporation, a diversified investment company. Mr. Ciechanover holds a law degree from the Hebrew University in Jerusalem, an L.L.M. from the University of California at Berkeley and a Ph.D. in philosophy from Boston University.

Dr. Alon Dumanis, is the Chief Executive Officer of Docor International Management, a Dutch Venture Capital, subsidiary of The Van-Leer group Foundation. Dr. Dumanis serves as member of various companies boards of directors, including El Al Israel Airlines, Inventech and others. Previously, Dr. Dumanis was the Head of The Material Command in the Israel Air Force with the rank of Brigadier General. Dr. Dumanis currently serves as chairperson and member of several national steering committees and is the author of many papers published locally and internationally in a number of subject areas, including technology and management. Dr. Dumanis holds a Ph.D. in Aerospace Engineering from Purdue University in the United States.

Ms. Lauri Hanover was appointed as the Company s external director in accordance with the provisions of Israeli law. Ms. Hanover has been serving since 1997 as Executive Vice President and Chief Financial Officer of Sapiens Intl. Corp NV, a software company. Prior to that, Ms. Hanover was employed by Scitex Corp. for a period of 12 years. Ms. Hanover s last position at Scitex Corp. was that of Corporate Controller, a position she held from 1995 to 1997. Ms. Hanover holds an M.B.A. degree from New York University, BSCE from Wharton School, University of Pennsylvania (Maj. Finance) and a B.A. from the University of Pennsylvania. Ms. Hanover also holds a master s degree in business administration from New York University.

Dr. Karey Holland was appointed as the Company s external director in accordance with the provisions of Israeli law. Dr. Holland serves concurrently as Vice President, Technology at Thomas West Inc., an equipment manufacturer for the semiconductor industry, and as senior

managing partner of Techcet, a company providing strategic technical services in the semiconductor industry. Prior to her current position, Dr. Holland was employed for over five years by IPEC, a semiconductor manufacturing company, and later SpeedFam-IPEC where she held the positions of vice president of process technology and later as vice president and chief technological officer. She worked for IBM from 1981 through 1993 where she held several positions including Sematech advanced lithography technology development program manager, process technology development manager and manufacturing implementation manager. After leaving IBM and before taking her position at IPEC, Karey spent nine months at Motorola in Manufacturing Planning for the Microprocessor and Memory Technology Group. Dr. Holland holds a Ph.D. in analytical chemistry from Pennsylvania State University.

Voting agreement

Some of our main shareholders (Inventech Investments Ltd., Teuza a Fairchild Technology Ventures Ltd., Clal Electronics Ltd., Giora Dishon and Moshe Finarov) entered into a voting agreement dated March 2000, with respect to the voting of their ordinary shares. The voting agreement provided that for every 8.0% of the outstanding ordinary shares held by a party to the voting agreement, such party had the right to nominate a person for election to the board of directors of the Company. All the parties to the voting agreement were required to vote all of their ordinary shares in favor of such nominee. The voting agreement terminated on April 11, 2002.

Compensation

The aggregate direct remuneration paid or payable to all 13 persons who served in the capacity of director or officer during 2002 was approximately $650 thousand, including approximately $200 thousand, which was set aside for pension and retirement benefits and including amounts expended by us for automobiles made available to our officers.

The Company has approved the terms of remuneration to the external directors of the Company, according to which the external directors shall receive remuneration comprised of: an annual payment in the amount of NIS 34,122 and an additional per meeting payment of NIS 1,270. Israeli Law determines these amounts, and adherence to these amounts exempts the Company from the need to obtain the approval of the Company s shareholders with respect to the remuneration paid to the external directors.

On November 7, 2001, the Company s shareholders approved payment of remuneration to the Company s directors in the same amounts as mentioned above for the external directors. The total amount paid or payable to the directors, including external directors, for 2002 is $73,000. In 2001, this amount was $74,000.

On December 24, 2001, the Company s Board of Directors and the Company s Audit Committee approved a grant to Mr. Meir Dayan, a former director of the company, of options, immediately exercisable, to purchase 15,000 of the Company s ordinary shares at an exercise price equal to the fair market value at the date of grant ($3.69). This decision was approved by the Company s shareholders on May 8, 2002.

On February 27, 2002, the Company s Board of Directors and the Company s Audit Committee approved the acceleration of the vesting period for 20,000 options granted to Mr. Mendy Erad, the former chairperson of the Company. This decision was approved by the Company s shareholders on May 8, 2002.

On September 5, 2002, the Company s Board of Directors and the Company s Audit Committee approved the issuance of options to directors according to the following:

Name of directors	Position	# of options
Giora Dishon	Director, CEO & President	60,000
Moshe Finarov	Director & CTO	50,000
Meir Shannie (*)	Former Director (resigned June, 2003)	10,000
Avi Kerbs	Director	10,000
Joseph Ciechanover	Director	10,000

These grants were approved by the shareholders on October 31, 2002. The options were granted during 2003 and are subject to the terms and conditions of the Company s Option Plan 6. The options vest over a period of between one and three years and their term may not exceed seven years from the date of grant. The exercise price of these options is $2.06 per share.

As of May 15, 2003 we entered into an agreement with Mr. Barry L. Cox according to which Mr. Cox shall serves as chairperson of our board of directors. Mr. Cox shall be entitled to gross annual compensation of $50,000 as well as a one-time grant of an option to purchase up to 50,000 ordinary shares of the Company, at the fair market value of the shares at the time of grant. Such option shall be vested during a three year period so that a third of the entire amount granted to Mr. Cox shall be exercisable upon each anniversary of the grant. The Agreement with Mr. Cox is still subject to shareholders approval, which is required under applicable Israeli law.

On May 15, 2003, the Company s Board of Directors and Audit Committee resolved (i) that the monthly gross salary of Dr. Dishon shall be increased to 44,000 NIS for the period February 1, 2003 through July 31, 2003 and increased to 50,000 NIS starting on August 1, 2003 and (ii) that the monthly gross salary of Dr. Finarov shall be increased to 40,000 NIS for the period February 1, 2003 through July 31, 2003 and increased to 44,000 NIS starting on August 1, 2003. These changes in the terms of compensation for Drs. Dishon and Finarov are subject to shareholder approval.

Board of Directors Committees

The Company s Board of Directors has appointed the following directors committees:

The *Audit Committee* is comprised of three members, as required under Israeli law. The members are Lauri Hanover, Karey Holland and Joseph Chiechanover. The functions of the audit committee according to Israeli Law are to locate deficiencies in the business management of the Company in consultation with the Company s auditors and to suggest the measures to be taken regarding such deficiencies. The audit committee is also responsible for approving related party transactions.

The *Compensation Committee* is comprised of Lauri Hanover, Karey Holland and Avi Kerbs. The function of the compensation committee is to determine the compensation of directors, senior management and employees (subject to provisions regarding related party transactions).

The *Investment Committee* is comprised of Lauri Hanover who serves as a single member of the investment committee as of the resignation of Mr. Meir Shannie. We intend to appoint another member of the investment committee in the forthcoming meeting of our board of directors. The function of the investment committee is to review and determine the cash investment policy of the cash reserves of the company.

Employees

	as of December 31,		
	2000	**2001**	**2002**
Total Personnel	303	249	215
Located in Israel	214	179	150
Located abroad (mainly U.S.)	89	70	65
In operations	51	37	41
In research and development	112	92	74
In sales and marketing	38	31	24
In service and support	69	66	60
In general and administration	33	23	16

Because the Company has been adversely affected by, and its financial results reflect, the general slowdown in the semiconductor equipment market since the beginning of 2001, and because the Company is unable to predict the length the severity of this slowdown, the Company has implemented a cost-reduction plan, which included a reduction in work force, as seen in the above table.

We are a member of the Industrialists Association in Israel, an employer s union. As a result of this membership, a number of collective bargaining agreements apply to us. These agreements principally concern cost of living wage increases, paid vacation and holidays, length of the workday, wage tariffs, termination and severance payments. We provide our employees with benefits and working conditions that are at least as favorable as those found in the collective bargaining agreements.

Israeli labor laws and regulations apply to all our employees. The laws principally concern matters such as paid vacation, paid sick days, length of the workday, payment for overtime and severance payments upon the retirement or death of an employee or termination of employment.

Share ownership

Giora Dishon, President, Chief Executive Officer and Co-Founder, and Moshe Finarov, Vice President, Director of Technology, Director and Co-Founder, own 754,491 and 754,492 ordinary shares of the Company, respectively. All other directors, external directors and senior management each hold less than 1% of the Company s shares. The following table sets forth information regarding options held by our directors and officers as of April 1, 2003:

Name	Ordinary Share Underlying Options	Expiration Dates	Exercise Prices ($/share)
Giora Dishon (1)	120,000	2007-2010	2.06-7.37
Moshe Finarov (1)	110,000	2007-2010	2.06-7.37
8 directors and officers as a group (1)	359,820	2004-2010	0.0023-7.37

(1) The vesting period of each option is between one and four years from the date of grant. Other than Drs. Dishon and Finarov, the directors and officers of the Company each own less than 1% of the Company s issued and outstanding ordinary shares.

Through December 31, 2002, options to acquire 3,470,822 ordinary shares have been issued under the share options plans, of which options to acquire 1,338,668 shares have been exercised, 209,752 have been forfeited and 1,149,186 were exercisable as of December 31, 2002.

As of December 31, 2002, we had six employee share option plans that provide for the grant of options to our employees, including senior management, to purchase an aggregate of 3,470,822 ordinary shares. The existing share option plans are described below (excluding the first share option plan that was comprised of options to acquire 827,700 ordinary shares, which have been fully exercised).

- Options to purchase 650,000 shares at an exercise price per share of NIS 0.01 (approximately $.0023); as of December 31, 2002, all options under this plan were granted, 498,476 options were exercised, 124,267 options were exercisable and 25,401 options were forfeited;
- Options to purchase 387,000 shares at an exercise price per share of $3.17; as of December 31, 2002, all options under this plan were granted, 12,142 options were exercised, 287,396 options were exercisable and 36,858 options were forfeited;
- Options to purchase 668,350 shares at exercise prices ranging from $6.27 or $7.37 per share; originally, this plan included 1,000,000 shares, and was reduced to 668,350 shares by decision of the board of directors of the Company. As of December 31, 2002, all options under this plan were granted, 350 options were exercised, 369,453 options were exercisable and 98,574 options were forfeited;
- Options to purchase 746,500 shares at an exercise prices of $1.13, $2.17 or $2.46, the fair market value of Nova s stock on the date of grant; as of December 31, 2002, all options under this plan were granted, non of the options were exercised, 206,798 options were exercisable and 48,919 options were forfeited;
- Options to purchase 116,272 ordinary shares at an exercise price of $5.16 per share; granted in March 1999 to Mendy Erad, the chairman of the board at that time; as of December 31, 2002, these options were fully exercisable;

- Options to purchase an aggregate of 75,000 ordinary shares at an exercise price of $3.69 per share granted to the members of our Board of Directors, other than our external directors; as of December 31, 2002, 45,000 of these options were exercisable;

In addition to the option plans described above, in 2003, the Company implemented an Employee Stock Purchase Plan pursuant to which eligible employees of the Company may purchase up to 150,000 ordinary shares, subject to certain adjustments, at a discounted price. The Employee Stock Purchase Plan is presently scheduled to run through 2004.

The following table summarizes information about share options outstanding as of December 31, 2002:

Outstanding as of December 31, 2002				Exercisable as of December 31, 2002	
Range of exercise prices	Number outstanding	Weighted average remaining contractual life	Weighted average exercise price	Number exercisable	Weighted average exercise price
(US dollars)		(in years)	(US dollars)		(US dollars)
0.0025	126,123	3.5	0.0025	124,267	0.0025
2.46-3.69	1,110,581	5.4	2.77	539,194	2.94
5.16	116,272	4	5.16	116,272	5.16
6.27-7.37	569,426	4.5	7	369,453	7
	1,922,402			1,149,186	

Item 7. Major Shareholder and Related Party Transactions

Major shareholders

Major shareholders

The following table shows the number of ordinary shares beneficially owned by persons known by us to own beneficially more than five percent of the Company s ordinary shares, as of June 16, 2003.

Name	Number of Ordinary Shares Beneficially Owned*	Percentage of Ordinary Shares Beneficially Owned
Clal Electronics Industries Ltd.	3,079,245	20.61%
Inventech Investments Co. Ltd.(1)	1,581,244	10.59%

Teuza - A Fairchild Technology Venture Ltd (2).	1,900,327	12.72%
Austin W. Marxe & David Greenhouse (3)	1,834,300	12.28%
Tamir Fishman Ventures II, L.L.C. (4)	843,300	5.64%
Shai Saul (4)	843,300	5.64%
Michael Elias (4)	850,550	5.69%
Tamir Fishman & Co. Ltd. (4)	848,400	5.68%
Eldad Tamir (4)	848,400	5.68%
Danny Fishman (4)	848,400	5.68%
Capital Group International, Inc.	774,800	5.19%
Giora Dishon (5)	785,737	5.25%
Moshe Finarov (5)	785,736	5.25%

* Unless specifically stated otherwise, the information provided hereinabove is based upon information contained in filings made by the named person with the U.S. Securities and Exchange Commission (SEC) pursuant to Regulation 13D-G.

(1) As reported by Inventech to the Tel Aviv Stock Exchange (TASE) on March 25, 2003 and April 13, 2003.

(2) The Company has been informed that Teuza-A Fairchild Technology Venture Ltd. has sold 149,000 shares of the Company shares held by it. However, as of June 16, 2003 the transaction was not fully completed and is therefore not reflected in the table above.

(3) As reported on the Schedule 13G (Amendment 1) filed by Messrs. Marxe and Greenhouse on February 13, 2003, the amount indicated includes 415,000 shares held by Special Situations Cayman Fund, L.P., 376,000 shares held by Special Situations Technology Fund, L.P. and 1,042,000 shares held by Special Situations Fund III, L.P.

(4) The following information is contained in a Schedule 13G filed by, among others, Tamir Fishman Ventures II, LLC (TFV), on June 3, 2003: (a) Five limited partnerships and a corporation directly beneficially own, in the aggregate, 843,300 shares; (b) TFV beneficially owns 843,300 shares as the sole general partner of the five limited partnerships and by virtue of its management rights with respect to corporation ; (b) Shai Saul, is a managing member of TFV; (c) Michael Elias is a managing member of TFV and reports having sole voting and dispositive power over an additional 7,250 shares; (c) Tamir Fishman & Co. Ltd is a managing member of TFV and reports directly owning 5,100 additional shares; (d) Eldad Tamir and Danny Fishman are each Co-President and Co-CEO of Tamir Fishman & Co. Ltd.

(5) Includes shares held in trust under Israeli tax law for the benefit of the named shareholders and includes option to purchase 31,245 ordinary shares which is exercisable within 60 days.

All major shareholders have the same voting rights.

Intel Corporation Inc., who held 1,299,948 shares, sold substantially all of its holdings during 2001.

The Company believes that, as of December 31, 2002, approximately 30% of its ordinary shares were held by United States holders.

Control of Registrant

To the Company s knowledge, it is not owned or controlled by a foreign government. Except for the shareholders identified above owning more than ten percent of the Company s ordinary shares, the Company has no knowledge of any corporation or other natural or legal person owning a controlling interest in the Company.

Related party transactions

Our former articles of association provided that Clal Electronic Industries Ltd. had the right to designate the chairman and one additional member of our board of directors, each of Teuza - a Fairchild Technology Venture Ltd., Inventech Investments Ltd. and our founders, Giora Dishon and Moshe Finarov, jointly had the right to designate one director and Intel had the right to designate one director or observer. Mendy Erad, our former chairman of the board, was the designee of Clal, Avi Kerbs was the designee of Teuza, Meir Dayan was the designee of Inventech and Moshe Finarov was the designee of the founders. Intel did not designate a director. Our current articles of association, adopted in February 2000, provide that directors are elected by a vote of the holders of a majority of shares represented at a shareholders meeting, provided that the holders of a majority of our shares are present, and no shareholder has a right to designate directors or observers. As discussed in Item 6 under the heading Voting Agreement, some of our shareholders had been party to a voting agreement relating to the election of directors. This agreement terminated on April 11, 2002.

We are parties to an agreement with our shareholders and our founders, Messrs. Dishon and Finarov. This agreement provides that each of Intel, Inventech Investments Ltd., Clal Electronics Industries Ltd. and Teuza Ltd, has one demand registration right and these shareholders and Drs. Dishon and Finarov have unlimited piggyback registration rights for our securities owned by them. The agreement provides that we will bear all expenses incurred for any registration of our securities, other than underwriting fees and expenses, and that we will indemnify the selling shareholders for liabilities arising from any registration, including liabilities under the Securities Act of 1933. This registration rights

agreement terminated in September 2002.

On March 16, 1999, we entered into an agreement with Mendy Erad, our former chairman of the board, that provided that he would serve as active chairman until December 31, 2001 and receive $6,000 per month. In addition, we have granted Mr. Erad an option to purchase 116,272 ordinary shares at a price of $5.16 per share. This option is fully vested and exercisable.

On July 24, 2000, our shareholders approved a bonus to Mendy Erad in the amount of $100,000.

On July 24, 2000, our shareholders approved the issuance of an option to purchase up to 40,000 ordinary shares to Moshe Finarov, a director and officer of the Company. The option was granted and is subject to the terms and conditions of the Company s option plan 4B, which provides that the option exercise price is $7.37. The options vest over a period of between one and four years and their term may not exceed seven years from the date of grant.

On November 7, 2001, the Company s shareholders approved payment of remuneration to the Company s directors in the same amounts as mentioned above for the external directors. The total amount paid or payable to the directors for 2002 is $73,000. In 2001, this amount was $74,000.

On November 7, 2001, the Company s shareholders approved the grant of up to an aggregate of 70,000 options to purchase ordinary shares to the members of the Company s Board of Directors, excluding the external directors and directors that also serve as Company officers. Pursuant to that approval, up to 10,000 options could be granted to each director and up to 20,000 options could be granted to the chairman of the board. The 70,000 authorized options were granted on December 24, 2001, with an exercise price of $3.69 per share (the market value of Nova stock at the date of grant), and vesting periods of one to four years.

On November 7, 2001, our shareholders approved the issuance of an option to purchase up to 20,000 ordinary shares to Giora Dishon, who at the time of such resolution served as CEO of the company and was later also appointed as a director of the Company. The option was granted and is subject to the terms and conditions of the Company s option plan 5. The options vest over a period of between one and four years and their term may not exceed seven years from the date of grant. The exercise price of these options is $2.46 per share.

On November 7, 2001, our shareholders approved the issuance of an option to purchase up to 20,000 ordinary shares to Moshe Finarov, a director and officer in the Company, subject to the terms and conditions of the Company s employee option plan 5. The options vest over a period of between one and four years, their term may not exceed seven years from the date of grant, and their exercise price is $2.46 per share.

On December 24, 2001, the Company s Board of Directors and the Company s Audit Committee approved a grant to Mr. Meir Dayan, a former director of the company, of options, immediately exercisable, to purchase 15,000 of the Company s ordinary shares at an exercise price equal to the fair market value at the date of grant ($3.69). This decision requires further approval of the Company s shareholders.

On February 27, 2002, the Company s Board of Directors and the Company s Audit Committee approved the acceleration of the vesting period for 20,000 options granted to Mr. Mendy Erad, the former chairman of the board of the Company. This decision requires further approval of the Company s shareholders.

On September 5, 2002, the Company s Board of Directors and the Company s Audit Committee approved the issuance of options to directors according to the following:

Name of directors	Position	# of options
Giora Dishon	Director, CEO & President	60,000
Moshe Finarov	Director & CTO	50,000
Meir Shannie (*)	Director	10,000
Avi Kerbs	Director	10,000
Joseph Ciechanover	Director	10,000

The options were granted during 2003 and are subject to the terms and conditions of the Company s option plan 6. The options vest over a period of between one and three years and their term may not exceed seven years from the date of grant. The exercise price of these options is $2.06 per share.

On May 8, 2002, the Company s shareholders approved a grant to Meir Dayan, a former director of the Company, of options, immediately exercisable, to purchase 15,000 ordinary shares at an exercise price equal to the fair market value at the date of grant ($3.69).

On May 8, 2002 the Company s shareholders approved the acceleration of the vesting period for 20,000 options granted to Mendy Erad, the former Chairman of the Board of Directors of the Company.

In 2002, the Company obtained directors and officers liability insurance for its officers and directors with coverage in an aggregate amount of $5,000,000. In addition, the Company undertook to indemnify the Company s officers and directors up to an aggregate amount of $15,000,000 pursuant to the terms set forth in an Indemnification and Exculpation Letter. The Indemnification and Exculpation Letter also exculpated the officers and directors from certain liabilities relating to their positions and directors and officers. The directors and officers insurance and Indemnification and Exculpation Letter, to the extent applicable to directors, were approved by the Company s shareholders on October 31, 2002.

For a description of the employment arrangements with Mr. Cox and Drs. Dishon and Finarov, see Item 6. Directors, Senior Management and Employees - Compensation.

Item 8. Financial Information

Consolidated Financial Statements

See Item 17. Financial Statements and pages F-1 through F-23.

Significant Changes

No significant change has occurred since the date of the annual financial statements.

Legal Proceedings

From time to time, we are a party to legal proceedings and claims in the ordinary course of business. We are not currently a party to any material legal proceedings. We have, however, been notified of a lawsuit involving Intel, our former shareholder and former affiliate, and many other semiconductor manufacturers. See Item 4, Intellectual Property for additional information.

Dividend Policies

We anticipate that we will retain any future earnings to support operations and to finance the growth and development of our business. Therefore, we do not expect to pay cash dividends for at least the next several years. Please see Israeli Taxation for a description of the conditions limiting our ability to declare and pay dividends under Israeli law.

Export Sales

Substantially all of our products are sold to customers located outside Israel.

Item 9. The Offer and Listing

Offer and listing details

The information presented in the table below presents, for the periods indicated, the reported high and low closing sales prices on the NASDAQ National Market of our ordinary shares. The shares began trading on the NASDAQ National Market on April 11, 2000 at a price of $18 per share. Our ordinary shares were registered for trading on the Tel Aviv Stock Exchange in 2002 and the table below presents, for the periods indicated, the reported high and low sales prices on the Tel Aviv Stock Exchange.

NASDAQ National Market

Price per share (US$)

		High	Low
Yearly highs and lows			
2000		21.94	6.56
2001		10.97	2.46
2002		4.54	0.86
Quarterly highs and lows			
2001			
	First quarter	10.25	4.29
	Second quarter	10.97	4.63
	Third quarter	5.90	2.46
	Fourth quarter	4.25	2.50
2002			
	First quarter	4.54	3.45
	Second quarter	3.70	2.19
	Third quarter	2.25	1.12
	Fourth quarter	2.00	0.86
2003			
	First quarter	2.62	1.42
Monthly highs and lows			
2002			
	December	2.27	1.00
2003			
	January	2.1	1.42
	February	2.62	2.06
	March	2.58	1.95
	April	2.5	2.21
	May	4.05	2.5

Tel Aviv Stock Exchange

		Price per share (NIS)	
		High	**Low**
Yearly highs and lows			
2002		1,158	1,080
Quarterly highs and lows			
2002			
	Second quarter	1,158	1,158
	Third quarter	1,158	1,158
	Fourth quarter	1,080	1,080
2003			
	First quarter	1,080	1,080
Monthly highs and lows			
2002			
	December	1,080	1,080
2003			
	January	1,080	1,080
	February	1,080	1,080
	March	1,080	1,080
	April	1,080	1,080
	May	1,080	1,080

Item 10. Additional Information

Set forth below is a summary of certain provisions of the Company s memorandum and articles of association, as amended to date, and Israeli law affecting shareholders of the Company. This summary does not purport to be complete and is qualified in its entirety by reference to our memorandum and articles of association and such law.

Registration. The Company was incepted and registered in the Israeli Registrar of Company s on May 17, 1993, under registration number 51-181-246-3.

Purpose of the Company. The purposes of the Company, as provided by Article B(3), are (a) to invent, design, plan, develop, manufacture, market and trade in the field of measuring instruments in electronics, micro-electronics, medicine, chemistry, metallurgy, ceramics and any other field, (b) to initiate, participate, manage, execute, import and export any kind of project within the borders of the State of Israel and/or outside Israel, (c) to register patents, trademarks, trade names intellectual property rights marketing rights and any other right of any kind whatsoever, both in Israel and abroad and (d) to engage in any legal activity, both in Israel and abroad.

Approval of Related Party Transaction; Corporate Borrowings. The Israeli Companies Law requires that an office holder of a company, including directors and executive officers, promptly disclose to the board of directors of that company any personal interest that the office holder or the affiliates of the office holder may have and all related material information known about any existing or proposed transaction with the company. Once the office holder complies with this disclosure requirement, the approval of the board of directors is required for the transaction unless the articles of association provide otherwise. If the transaction is an extraordinary transaction, it also requires the approval of the audit committee and the shareholders.

The Companies Law applies the same disclosure requirements to a controlling shareholder of a public company. A controlling shareholder is a shareholder who has the ability to direct the activities of a company, including a shareholder that owns 25% or more of the voting rights if no other shareholder owns more than 50% of the voting rights, but excluding a shareholder whose power derives solely from his or her position on the board of directors or any other position with the company.

Under our articles of association, a transaction by the Company with an officer or director of the Company, in which transaction such officer or director has a personal interest, other than an extraordinary transaction, does not require any board or shareholder approval. Interested board members may not vote on extraordinary transactions. Arrangements regarding the compensation of directors are considered extraordinary transactions and require approval by the board or directors, audit committee and the shareholders. Arrangements as to compensation of officers who are not directors require approval only by the board of directors.

Under regulations promulgated under the Companies Law regarding payment of compensation to external directors, compensation of external directors shall be comprised of annual compensation ranging from NIS 26,000 to NIS 42,425 and a per meeting payment ranging from NIS 925 to NIS 1,625. These amounts are adjusted twice a year in accordance with the Israeli consumer price index. The approval of the shareholders of the company is required for such compensation, unless it is at a fixed amount set forth in these regulations. Additionally, external directors are entitled to compensation in stock (including by way of granting options to purchase the company s stock) provided that such compensation is granted within the framework of a stock incentive plan applicable to all other directors and further provided the amount of stock granted or purchasable shall not fall below the lowest amount granted to any other director and shall not exceed the average amount of stock granted to all other directors.

Our articles of association grant broad powers to the board of directors to authorize the Company to borrow funds, repay borrowings, make guarantees and grant security interests in borrowings. There is no mandatory retirement age for the Company s directors and a director need not be a shareholder of the Company.

Share Capital. The Company currently has one class of ordinary stock, 0.01 NIS par value per share. Our articles of association provide that the board of directors may declare dividends out of funds legally available therefor. Under the Israeli Companies Law, dividends may be paid out of net earnings, as calculated under that law, for the two years preceding the distribution of the dividend and retained earnings, provided that there is no reasonable concern that the dividend will prevent the company from satisfying its existing and foreseeable obligations as they become due. For more information see the Company s balance sheet and the statement of shareholders equity in the financial statements.

Changes of Rights of Holders of the Ordinary Shares. The rights attached to the ordinary shares may be changed, converted, expanded or altered in any other way by the shareholders with the vote of the holders of at least 75% of the holders of the ordinary shares.

Shareholders Meetings. An annual meeting shall be convened at least once every calendar year, and no later than 15 months after the preceding annual meeting, to deliberate on the financial reports, appointment of directors, appointment of an auditing accountant, and any other matter which the board of directors places on the agenda of the annual meeting, at a time and place that the board of directors shall determine. An extraordinary meeting may be called by the board of directors and at the demand of any of the following: two directors or one-quarter of the directors then serving; one or more shareholders who hold at least five per cent of the issued and outstanding capital stock and at least one percent of the voting rights in the Company; or one or more shareholders who hold at least five percent of the voting rights in the Company.

According to our articles of association, the quorum required for an ordinary meeting of shareholders is at least two shareholders present in person or by proxy who together hold or represent in the aggregate more than 33% of the voting power. A meeting adjourned for lack of a quorum is adjourned to the same day in the following week at the same time and place or any time and place as the chairman may designate with the consent of a majority of the shareholder votes cast on the matter. At the reconvened meeting, the required quorum consists of any number of members present in person or by proxy, regardless of the number of shares represented. A notice regarding a general meeting must be sent at least 21 days before the meeting to every shareholder of record, unless a shorter period has been set by the board of directors, which shall be not less than seven days prior to the date of the general meeting. Every holder of record of the ordinary shares as of the record date fixed in such notice is entitled to vote at the shareholders meeting.

There are no limitations on the rights of non-resident or foreign owners to hold or vote ordinary shares imposed under Israeli law or under the Company s memorandum or articles of association.

Board of Directors. Our articles of association provide that directors may be elected either at our annual general meeting or an extraordinary meeting of shareholders by a vote of the holders of at least 50% of the total number of votes represented at such meeting. In addition, our board of directors is authorized to appoint directors, at its discretion, provided that the total number of directors shall not exceed the maximum number of directors permitted by our articles of association. Each of our directors holds office until the next annual general meeting of shareholders. However, in accordance with the Companies Law, our external directors serve for three years. The Companies Law requires that the offices of the Chief Executive Officer and the Chairman of the board of directors be held by different persons. However, the Companies Law further provide that those positions may be held by the same person for a period not exceeding three years if approved by a majority of the company s shareholder which shall include at least two thirds of the voting shareholders which are not controlling shareholders.

External directors may be elected at our annual general meeting or an extraordinary meeting of our shareholders in a number and manner stipulated by law, namely, for a term of three years which may be renewed for only one additional three year term and requires the affirmative vote of a majority of the shares and in addition either that (i) at least one third (33.33%) of the holders of shares who are not controlling shareholders attending in person or represented by proxy have voted in favor of the proposal, or (ii) the aggregate number of shares voting against the proposal have not exceeded one per cent (1%) of the Company s issued and outstanding share capital. External directors may be removed from office only under the following circumstances: (i) an outside director ceases to meet the legal requirements for appointment as an outside directors or breaches his or her fiduciary duty to the company and a resolution to remove such outside director is made by the shareholders at a meeting at which such outside director is granted a reasonable opportunity to express his position; (ii) an outside director ceases to meet the legal requirements for appointment as an outside director or breaches his or her fiduciary duty to the company and a court orders that such director be removed; or (iii) an outside director is unable to perform his or her duties or is convicted of certain felonies and a court orders that such director be removed.

The board of directors has the authority to issue preferred stock in one or more classes or series and to fix the voting powers, preferences and relative participating, optional or other special rights of such preferred stock, without any further vote or action by the shareholders. The authority given to the board of directors to issue preferred stock without seeking the approval of the shareholders may have the effect of delaying a change in control of the Company.

Changes in Capital. Our share capital may be increased or decreased by a vote of the holders of at least 75% of the shares present at the shareholders meeting.

Material Contracts

Lease Agreement between Nova and Ef-Shar Ltd. dated May 28, 2000 for Nova s facilities in Israel. A summary of this lease is provided at Exhibit 4.13.

Exchange Controls

Non-residents of Israel who purchase our ordinary shares outside of Israel with U.S. dollars or other foreign currency will be able to convert dividends (if any) thereon, and any amounts payable upon the dissolution, liquidation or winding up of the affairs of the Company, as well as the proceeds of any sale in Israel of the ordinary shares to an Israeli resident, into freely repatriable dollars, at a rate of exchange prevailing at the time of conversion, pursuant to regulations issued under the Currency Control Law, 1978, provided that Israeli income tax has been withheld by the Company with respect to such amounts. Israeli residents are eligible to purchase securities of certain companies, including our ordinary shares, if they are listed on a foreign exchange in a designated country, which is defined to include the NASDAQ.

Taxation

The following summary describes the current tax structure applicable to companies in Israel, with special reference to its effect on us. It also discusses Israeli tax consequences material to persons holding our ordinary shares. Because some parts of the summary are based on new tax legislation yet to be judicially or administratively interpreted, we cannot be sure that the views expressed will accord with any future interpretation. The summary is not intended, and should not be construed, as legal or professional tax advice and does not exhaust all possible tax considerations. Accordingly, you should consult your own tax advisor as to the particular tax consequences of an investment in our ordinary shares.

Tax Reform

During the year 2002, tax reform legislation was enacted with effect from January 1, 2003, which significantly changed the taxation basis of corporate and individual taxpayers from a territorial basis to a worldwide basis. From such date, an Israel resident taxpayer will be taxed on income produced and derived both in and out of Israel. The main provisions of the tax reform that may affect the Company are as follows:

Transfer pricing of international transactions with related parties.
The Income Tax Ordinance was amended to include provisions earning transfer pricing between related parties, where one of the parties is situated abroad. Detailed provisions are to be included in Income Tax Regulations that have yet to be issued. Although the Company considers that the transfer pricing policy adopted with foreign affiliates is economically fair, an adjustment may be required following the issue of the said Regulations.

Employee stock incentive plans.
The tax reform codified past practice and determined three alternative tracks for taxing employee stock option plans. Where a trustee arrangement is in place, the employer can either claim an expense for tax purposes while the employee will be fully taxed up to the maximum marginal tax rate of 50% or the Company can waive the tax expense and the employee will pay a reduced tax rate of 25%. Where there is no trustee arrangement, the employee is fully taxable and no expense is allowed to the Company. There are detailed provisions for implementing these tracks. The Company is considering the alternatives.

Controlled foreign company (CFC).
The amendment to the law introduced Controlled Foreign Company (CFC) provisions, which, in certain circumstances, will lead to the Israeli company being charged to tax on passive income of foreign affiliates as if it had received a dividend from such companies.

Capital gains tax
Capital gains tax is reduced to 25% from 36%, except with respect to capital gains from marketable securities, with transitional provisions for assets acquired prior to January 1, 2003.

C*arrying forward of capital losses*
The seven year limit for carrying forward of capital losses has been removed with respect to capital losses arising from 1996 and thereafter.

General Corporate Tax Structure

Israeli companies are taxed at a rate of 36% of taxable income. However, the effective tax rate payable by a company that derives income from an approved enterprise may be considerably less, as further discussed below.

Tax Benefits under the Law for the Encouragement of Capital Investments, 1959

The Law for the Encouragement of Capital Investments, 1959, provides that upon application to the Investment Center of the Ministry of Industry and Commerce of the State of Israel, a proposed capital investment in eligible facilities may be designated as an approved enterprise. Each certificate of approval for an approved enterprise relates to a specific investment program delineated both by its financial scope, including its capital sources, and by its physical characteristics, such as the equipment to be purchased and utilized under the program. The tax benefits derived from this certificate of approval relate only to taxable income derived from growth in operations as determined generally by the growth in manufacturing revenues attributable to the specific approved enterprise. If a company has more than one approval or only a portion of its capital investments are approved, its effective tax rate is the result of a weighted combination of the applicable rates. The tax benefits under the law are not available for income derived from products manufactured outside of Israel.

Taxable income of a company derived from an approved enterprise is taxed at the maximum rate of 25%, rather than the usual rate of 36%, for the benefit period. This period is ordinarily seven years commencing with the year in which the approved enterprise first generates taxable income, and is limited to 12 years from the year of commencement of operations, as determined by the Investment Center, or 14 years from the year of approval, whichever is earlier.

A company owning an approved enterprise may elect to receive an alternative package of benefits. Under the alternative package, the company s undistributed income derived from an approved enterprise will be exempt from tax for a period of between two and ten years from the first year of taxable income, depending on the geographic location of the approved enterprise within Israel, subject to the 12- and 14-year limitations, and the company will be eligible for the tax benefits under the law for the remainder of the benefits period.

A company that has an approved enterprise program is eligible for further tax benefits if it qualifies as a foreign investors company. A foreign investors company is a company more than 25% of whose share capital and combined share and loan capital is owned by non-Israeli residents. A company, which qualifies as a foreign investors company and has an approved enterprise program is eligible for tax benefits for a ten-year benefit period instead of the ordinary seven-year period. Income derived from the approved enterprise program will be exempt from tax for a specified period and will be taxed at a reduced rate for the rest of the period. The tax rate for the additional eight years is 25% unless the level of foreign investment exceeds 49%, in which case the tax rate is 20% if the foreign investment is more than 49% and less than 74%, 15% if more than 74% and less than 90%, and 10% if 90% or more.

The Investment Center bases its decision of whether to approve or reject a company s application for designation as an approved enterprise on criteria set forth in the law and related regulations, the then prevailing policy of the Investment Center and the specific objectives and financial criteria of the applicant. Accordingly, a company cannot be certain in advance whether its application will be approved. In addition, the benefits available to an approved enterprise are conditional upon compliance with the conditions stipulated in the law and related regulations and the criteria set forth in the specific certificate of approval. In the event that a company violates these conditions, in whole or in part, it would be required to refund the amount of tax benefits plus an amount linked to the Israeli consumer price index and interest.

A major portion of our production facilities has been granted the status of approved enterprises. Income arising from our approved enterprise facilities is tax-free under the alternative package of benefits described above and entitled to reduced tax rates of up to 25%, based on the level of foreign ownership for specified periods. We have derived, and expect to continue to derive, a substantial portion of our income from our approved enterprise facilities. In general, the benefits for most of our current production facilities in Israel will continue until termination in 2008. Our current investments in development facilities are made under new approvals.

An approved enterprise may elect to distribute dividends from taxable or tax-exempt income. Dividends distributed from taxable income are considered to be attributable to the entire taxable income of the enterprise and their effective tax rate is the result of a weighted combination of the applicable tax rates. We currently intend to reinvest the amount of our income and not to distribute such income as a dividend. In the event that we do pay a cash dividend from income that is derived from our approved enterprises under the alternative package of benefits, which income would normally be tax-exempt, we would be required to pay tax on the amount intended to be distributed as dividends at the rate which would have been applicable had we not elected the alternative package of benefits, generally 10% to 25%, depending on the percentage of our shares held by foreign shareholders. The dividend recipient is taxed at the reduced rate of 15% applicable to dividends from approved enterprises if the dividend is distributed during the tax-exemption period or within 12 years thereafter. We would be required to withhold this tax at source, as final tax in Israel. See U.S. Tax Considerations Regarding Shares Acquired by U.S. Taxpayers Distributions on the Ordinary Shares and Note 10 to our consolidated financial statements.

The law also provides that an approved enterprise is entitled to accelerated depreciation on property and equipment included in an approved investment program, generally ranging from 200% for equipment, to 400% for buildings, of ordinary depreciation rates during the first five tax years of the operation of these assets with a ceiling of 20% per year for depreciation on buildings.

Tax Benefits for Research and Development

Israeli tax law allows a tax deduction in the year incurred for expenditures, including capital expenditures, in scientific research and development projects, if the projects are approved by the relevant Israeli government ministry and the research and development is for the promotion of the enterprise. Expenditures from projects not so approved are deductible over a three-year period. However, government grants received by us are deducted from company expenses for tax purposes under Israeli law.

Tax Benefits under the Law for the Encouragement of Industry (Taxes), 1969

According to the Law for the Encouragement of Industry (Taxes), 1969, an industrial company is a company located in Israel, of which at least 90% of the income, exclusive of income from defense loans, capital gains, interest and dividends, is derived from an industrial enterprise owned by it. An industrial enterprise is defined as an enterprise whose major activity in a given tax year is industrial production activity. We believe that we currently qualify as an industrial company within the definition of the Law for the Encouragement of Industry (Taxes), 1969.

Under the law, industrial companies are entitled to the following preferred corporate tax benefits:

- deduction of purchases of know-how and patents over an eight-year period for tax purposes;
- deduction of specified expenses incurred in connection with a public issuance of securities over a three-year period for tax purposes, although Israeli tax authorities have indicated that they do not allow these deductions in connection with offerings outside of Israel;
- an election to file a consolidated tax return with related Israeli industrial companies that satisfy conditions set forth in the law; and
- accelerated depreciation rates on equipment and buildings.

Eligibility for the benefits under the law does not require receipt of prior approval from any governmental authority. However, the Israeli tax authorities may determine that we do not qualify as an industrial company. In addition, we might not continue to qualify as an industrial company in the future. As a result of either of the foregoing, the benefits described above might not be available in the future.

Special Provisions Relating to Taxation Under Inflationary Conditions

The Income Tax Law (Inflationary Adjustments) (the Inflationary Adjustments Law), 1985 represents an attempt to overcome the problems presented to a traditional tax system by an economy undergoing inflation. The law is highly complex. Its features that are material to us can be described as follows:

- A special tax adjustment for the preservation of equity whereby corporate assets are classified broadly into fixed, or inflation immune assets and non-fixed, or soft assets. Where a company s equity exceeds the depreciated cost of its fixed assets, the company may take a deduction from taxable income, including tax-exempt income, that reflects the effect of multiplication of the annual rate of inflation on this excess, up to a ceiling of 70% of taxable income, including tax exempt income, in any single tax year, with the unused portion carried forward on a linked basis. If the depreciated cost of fixed assets exceeds a company s equity, then the excess multiplied by the annual rate of inflation is added to taxable income.
- Depreciation deductions on fixed assets and losses carried forward are generally adjusted for inflation based on the increase of the Israeli consumer price index.
- Gains on traded securities which are normally exempt from tax are taxable in specified circumstances. However, the regular tax rules governing business income in Israel apply to dealers in securities.

In accordance to a recent amendment to the Inflationary Adjustments Law, the Minister of Finance may, with the approval of the Knesset Finance Committee, determine by order, during a certain fiscal year (or until February 28th of the following year), in which the rate of increase of the price index would not exceed or shall not have exceeded, as applicable, 3%, that all or some of the provisions of this law shall not apply to such fiscal year, or, that the rate of increase of the price index relating to such fiscal year shall be deemed to be 0%, and to make the adjustments required to be made as a result of such determination.

Capital Gains Tax

Israeli law imposes a capital gains tax on the sale of capital assets. The law distinguishes between the inflationary surplus and the real gain. The inflationary surplus is a portion of the total capital gain which is equivalent to the increase of the relevant asset s purchase price that is attributable to the increase in the Israeli consumer price index between the date of purchase and the date of sale. The real gain is the excess of the

total capital gain over the inflationary surplus. Inflationary surplus accumulated after December 31, 1993 is exempt from any capital gains tax in Israel. The real gain is added to ordinary income, which is taxed at ordinary rates of 30% to 50% for individuals and 36% for corporations.

Under current law, gains on sales of our ordinary shares are exempt from Israeli capital gains tax by individuals and corporations which conduct no trade or business and whose shares are held only by individuals for so long as our ordinary shares are quoted on Nasdaq or another stock exchange recognized by the Israeli Controller of Foreign Currency and we qualify as an industrial company. The Israeli tax authorities might determine that we do not qualify as an industrial company. We might not maintain our listing on Nasdaq or our status as an industrial company in the future.

As a result of the recent tax reform legislation in Israel, gains from the sale of our ordinary shares and warrants to purchase our ordinary shares derived from January 1, 2003 and on will in general be liable to capital gains tax of up to 15% while our shares are eligible for sale on a designated foreign stock market such as the NASDAQ. However, according to the tax reform legislation, non-residents of Israel will be exempt from any capital gains tax from the sale of our securities so long as the gains are not derived through a permanent establishment that the non-resident maintains in Israel, and so long as our securities remain listed for trading as described above. These provisions dealing with capital gains are not applicable to a person whose gains from selling or otherwise disposing of our securities are deemed to be business income or whose taxable income is determined pursuant to the Israeli Income Tax Law (Inflation Adjustments), 1985. The Israeli Income Tax Law (Inflation Adjustments) would not normally be applicable to non-resident shareholders who have no business activity in Israel.

In any event, under the US-Israel Tax Treaty, a US treaty resident may only be liable for Israeli capital gains tax on the sale of our ordinary shares (subject to the provisions of Israeli domestic law as described above) if that US treaty resident holds 10% or more of the voting power in our company.

Under a treaty between the governments of the United States and Israel, Israeli capital gains tax does not apply to the sale, exchange or disposition of ordinary shares by a person who qualifies as a resident of the United States within the meaning of the treaty and who is entitled to claim the benefits afforded to such resident by the treaty. This exemption does not apply if the person holds, directly or indirectly, ordinary shares representing 10% or more of our voting power during any part of the 12-month period preceding the applicable sale, exchange or disposition. However, the person would be permitted to claim a credit for the capital gains tax paid in Israel against the U.S. income tax imposed for the applicable sale, exchange or disposition, subject to the limitations in U.S. laws applicable to foreign tax credits. The U.S.-Israel Tax Treaty does not relate to the U.S. state or local taxes.

Taxation of Non-Resident Holders of Our Shares

Non-residents of Israel pay income tax on income accrued or derived from sources in Israel. These sources of income include passive income such as dividends, royalties and interest, as well as non-passive income from services rendered in Israel. On distributions of dividends other than bonus shares, or stock dividends, income tax at the rate of 25% is withheld at source. If the income out of which the dividend is being paid is attributable to an approved enterprise, the rate is 15%. A different rate may be provided in a treaty between Israel and the shareholder s country of residence. Under the U.S.-Israel Tax Treaty, the maximum tax on dividends paid to a U.S. resident is 25%. Also, under such Treaty, if the income out of which the dividend is being paid is attributable to an approved enterprise and the non-resident is a U.S. corporation that holds 10% of the company s voting power, the rate is 12.5%.

A non-resident of Israel who receives interest, dividend or royalty income derived from or accrued in Israel, from which tax was withheld at the source, is generally exempt from the duty to file tax returns in Israel on such income, provided that income was not derived from a business conducted in Israel by the taxpayer.

Under Israeli law, non-Israeli corporations might be required to pay Israeli taxes on the sale of traded securities in an Israeli company, taking into consideration the provisions of any applicable double taxation treaty.

Foreign Exchange Regulations

Non-residents of Israel who hold our ordinary shares are able to receive any dividends, and any amounts payable upon the dissolution, liquidation and winding up of our affairs, freely repatriable in non-Israeli currency at the rate of exchange prevailing at the time of conversion. However, Israeli income tax is required to have been paid or withheld on these amounts. In addition, there are currently no Israeli currency control restrictions on the proceeds from the sale of ordinary shares. However, legislation remains in effect by which currency controls can be imposed by administrative action at any time.

U.S. TAXATION

The following describes the material United States federal income tax consequences of the purchase, ownership and disposition of the ordinary shares to a U.S. holder.

For purposes of this discussion, a U.S. holder is:

a natural person who is a citizen or resident of the United States;

a corporation or another entity taxable as a corporation created or organized under the laws of the United States or any political subdivision of the United States;

an estate, the income of which is includable in gross income for United States federal income tax purposes regardless of its source; or

a trust, if (a) a U.S. court is able to exercise primary supervision over its administration and (b) one or more U.S. persons have the authority to control all of its substantial decisions.

This summary is for general information purposes only and does not purport to be a comprehensive description of all of the U.S. federal income tax considerations that may be relevant to a decision to purchase, hold or dispose of the ordinary shares. This summary generally considers only U.S. holders that will own the ordinary shares as capital assets and does not consider the U.S. tax consequences to a person that is not a U.S. holder or the tax treatment of persons who hold the ordinary shares through a partnership or other pass-through entity. In addition, the possible application of U.S. federal estate or gift taxes or any aspect of state, local or non-U.S. tax laws is not considered. This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended (the Code), current and proposed Treasury Regulations promulgated under the Code, and administrative and judicial interpretations of the Code, all as in effect today and all of which may change, possibly with a retroactive effect.

This discussion does not address all aspects of U.S. federal income taxation that may be relevant to any particular U.S. holder based on the holder s particular circumstances, such as,

persons who own, directly, indirectly or constructively, 10% or more of our outstanding voting shares;

persons who hold the ordinary shares as part of a hedging, straddle or conversion transaction;

persons whose functional currency is not the dollar;

persons who acquire their ordinary shares in a compensatory transaction;

broker-dealers;

insurance companies;

tax-exempt organizations;

financial institutions; and

persons subject to the alternative minimum tax.

Distributions on the Ordinary Shares

We currently do not intend to pay dividends for at least the next several years. However, if we make any distributions of cash or other property to a U.S. holder of our ordinary shares, the amount of the distribution for U.S. federal income tax purposes will equal the amount of cash and the fair market value of any property distributed and will also include the amount of Israeli taxes withheld, if any, as described above under Israeli Taxation Taxation of Non-Resident Holders of Our Shares. In general, a distribution paid by us on the ordinary shares to a U.S. holder will be treated as dividend income if the distribution does not exceed our current and accumulated earnings and profits, as determined for U.S. federal income tax purposes. The amount of any distribution which exceeds these earnings and profits will be treated first as a non-taxable return of capital, reducing the U.S. holder s tax basis in its ordinary shares to the extent thereof, and then as capital gain from the deemed disposition of the ordinary shares. Corporate holders generally will not be allowed a deduction for dividends received on the ordinary shares.

A dividend paid by us in NIS will be included in the income of U.S. holders at the U.S. dollar value of the dividend, based upon the spot rate of exchange in effect on the date of the distribution. U.S. holders will have a tax basis in the NIS for U.S. federal income tax purposes equal to that U.S. dollar value. Any subsequent gain or loss resulting from exchange rate fluctuations between the day the dividend was included

in income of U.S. holders and the day the NIS are converted into U.S. dollars or otherwise are disposed of, will be taxable as ordinary income or loss from U.S. sources.

Dividends paid by us generally will be foreign source passive income for U.S. foreign tax credit purposes or, in the case of a U.S. holder that is a financial services entity, financial services income. U.S. holders may elect to claim as a foreign tax credit against their U.S. federal income tax liability the Israeli income tax withheld from dividends received on the ordinary shares. The Code provides limitations on the amount of foreign tax credits that a U.S. holder may claim. U.S. holders that do not elect to claim a foreign tax credit may instead claim a deduction for Israeli income tax withheld, but only for a year in which these U.S. holders elect to do so for all foreign income taxes. The rules relating to foreign tax credits are complex, and you should consult your tax advisor to determine whether and if you would be entitled to this credit.

Sale or Exchange of the Ordinary Shares

Upon the sale or exchange of the ordinary shares, a U.S. holder generally will recognize capital gain or loss in an amount equal to the difference between the amount realized on the sale or exchange and the U.S. holder s tax basis in the ordinary shares. The gain or loss recognized on the sale or exchange of the ordinary shares generally will be long-term capital gain or loss if the U.S. holder s holding period of the ordinary shares is more than one year at the time of the disposition.

Gain or loss recognized by a U.S. holder on a sale or exchange of ordinary shares generally will be treated as U.S. source income or loss for U.S. foreign tax credit purposes. Under the tax treaty between the United States and Israel, gain derived from the sale, exchange or other disposition of ordinary shares by a holder who is a resident of the United States for purposes of the treaty and who sells the ordinary shares within Israel may be treated as foreign source income for U.S. foreign tax credit purposes.

Passive Foreign Investment Companies

In general, a foreign corporation will be a passive foreign investment company for any taxable year if either (1) 75% or more of its gross income in the taxable year is passive income, or (2) 50% or more of the average value of its gross assets in the taxable year is held for the production of, or produces, passive income. For purpose of the income test, passive income includes dividends, interest, royalties, rents, annuities and net gains from the disposition of assets, which produce passive income. For purposes of the assets test, assets held for the production of passive income includes assets held for the production of, or that produce dividends, interest, royalties, rents, annuities, and other income included in the income test. The income test is conducted at the taxable year-end. The asset test is conducted on a quarterly basis and the quarterly results are then averaged together.

If a corporation is treated as a passive foreign investment company for any year during a U.S. holder s holding period and the U.S. holder does not timely elect to treat the corporation as a qualified electing fund under Section 1295 of the Code or elect to mark its ordinary shares to market, any gain on the disposition of the shares will be treated as ordinary income, rather than capital gain, and the holder will be required to compute its tax liability on that gain, as well as on dividends and other distributions, as if the income had been earned ratably over each day in the U.S. holder s holding period in the shares. The portion of the gain and distributions allocated to prior taxable years in which a corporation was a passive foreign investment company will be taxed at the highest ordinary income tax rate in effect for each taxable year to which this portion is allocated. An interest charge will be imposed on the amount of the tax allocated to these taxable years. A U.S. holder may elect to treat a corporation as a qualified electing fund only if the corporation complies with requirements imposed by the IRS to enable the shareholder and the IRS to determine the corporation s ordinary income and net capital gain. Additionally, if a corporation is a passive foreign investment company, a U.S. holder who acquires shares in the corporation from a decedent will be denied the normally available step-up in tax basis to fair market value for the shares at the date of death and instead will have a tax basis equal to the decedent s tax basis if lower than fair market value.

Status of Nova as a Passive Foreign Investment Company. Under the income test, less than 75% of our gross income was passive income in 2002. The determination of the company s status under the asset test is more difficult, because that test requires a quarterly determination of the fair market value of the company s passive and non-passive assets. For 2002, because we continue to have substantial amounts of cash and short-term deposits and the market value of our ordinary shares has decreased, a determination of the value of our non-passive assets by reference to the market value of our ordinary shares would result in a conclusion that the average value of our passive assets exceeds 50% of the average value of our gross assets. Therefore, there is a risk that we were a passive foreign investment company in 2002 or we will be a passive foreign investment company in subsequent years. There is, however, no requirement that the fair market value of a company s assets be determined solely by reference to the market value of the company s stock. Accordingly, after making a determination of the gross fair market value of its non-passive assets, the company believes that the average percentage of the value of its passive assets is less than 50% of the average gross fair market value of its total assets. If we will be treated as a passive foreign investment company for any taxable year, U.S. holders should consider whether or not to elect to treat us as a qualified electing fund or to elect to mark to market the ordinary shares. In

particular, if a U.S. holder makes a qualified electing fund election for all taxable years that the U.S. holder holds the ordinary shares during which we are treated as a passive foreign investment company, the U.S. holder will be required for each taxable year to include in income a pro rata share of our undistributed ordinary earnings and net capital gain, if any, as ordinary income and long-term capital gain, respectively. We will comply with all the requirements of the Code so that U.S. holders of our ordinary shares will be able to elect to treat Nova as a qualified electing fund if they so choose.

Alternatively, if a U.S. holder elects to mark-to-market the ordinary shares, the U.S. holder will generally include in income any excess of the fair market value of the ordinary shares at the close of each taxable year over the holder s adjusted basis in such stock. A U.S. holder generally will be allowed an ordinary deduction for the excess, if any, of the adjusted tax basis of the ordinary shares over the fair market value of the ordinary shares as of the close of the taxable year, or the amount of any net mark-to-market gains recognized for prior taxable years, whichever is less. A U.S. holder s adjusted tax basis in the ordinary shares will generally be adjusted to reflect the amounts included or deducted under the mark-to-market election. Additionally, any gain on the actual sale or other disposition of the ordinary shares generally will be treated as ordinary income. Ordinary loss treatment also will apply to any loss recognized on the actual sale or other disposition of ordinary shares to the extent that the amount of such loss does not exceed the net mark-to-market gains previously included with respect to such stock. An election to mark-to-market generally will apply to the taxable year in which the election is made and all subsequent taxable years.

If a U.S. holder makes one of these two elections, distributions and gain will not be recognized ratably over the U.S. holder s holding period or be subject to an interest charge as described above. Further, the denial of basis step-up at death described above will not apply. If a U.S. holder elects to treat us as a qualified electing fund, gain on the sale of the ordinary shares will be characterized as capital gain. However, U.S. holders making one of these two elections may experience current income recognition, even if we do not distribute any cash.

A number of specific rules and requirements apply to both of these elections, and you are urged to consult your tax advisor concerning these elections if we become a passive foreign investment company.

United States Information Reporting and Backup Withholding

Dividend payments and proceeds from the sale or disposal of ordinary shares may be subject to information reporting to the Internal Revenue Service and possible U.S. federal backup withholding at the rate of 31%. Backup withholding will not apply, however, to a holder who furnishes a correct taxpayer identification number or certificate of foreign status and makes any other required certification or who is otherwise exempt from backup withholding (for example, if you are a corporation). Any U.S. holder who is required to establish exempt status generally must file Internal Revenue Service Form W-9 (Request for Taxpayer Identification Number and Certification). Finalized Treasury Regulation, which are applicable to payments made after December 31, 2000, have generally expanded the circumstances under which information reporting and backup withholding may apply.

Amounts withheld as backup withholding may be credited against a U.S. holder s federal income tax liability. A U.S. holder may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the Internal Revenue Service and furnishing any required information.

Documents on Display

The documents referred to herein, including our memorandum and articles of association, can be obtained from the Company at its registered office at Weizmann Science Park, Building 22, 2nd Floor, Rehovot 76100, Israel. In addition, the Company is subject to certain informational requirements of the Securities Exchange Act of 1934 and the rules and regulations promulgated thereunder. In accordance therewith, the Company files reports with the United States Securities and Exchange Commission (SEC). Reports and other information provided to the SEC by the Company may be inspected and copied at the public reference facilities maintained by the SEC at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549. Information on the operation of the public reference facilities may be obtained by calling the SEC at 1-800-SEC-0330. In addition, certain of the Company s reports filed with the SEC are available on-line at www.sec.gov.

Item 11. Quantitative and Qualitative Disclosures About Market Risk

Market risk

Market risk represents the risk of loss that may impact the consolidated financial position, results of operations or cash flows of the Company. The Company is exposed to market risk in the area of foreign exchange rates, as described below.

The Company does not utilize financial instruments for trading purposes and holds no derivative financial instruments that could expose it to significant market risk.

Impact of Inflation and Currency Fluctuation

Substantially all of our sales are made in U.S. dollars. Over 50% of our expenses in 2002 were in dollars or in NIS linked to the dollar. Most of the remaining expenses were in NIS. The dollar cost of our operations in Israel is influenced by any increase and the timing of such increase, in the rate of inflation in Israel that is not offset by the devaluation of the NIS in relation to the dollar. During 2002, the value of the NIS decreased against the dollar by 7.3%, while the consumer price index in Israel increased by 6.5%. During 2001, the value of the NIS decreased against the dollar by 9.3%, while the consumer price index in Israel increased by 1.4%. During 2000, the value of the NIS decreased against the dollar by 2.7%, while the consumer price index in Israel did not change. See Note 2A of our consolidated financial statements. We believe that the rate of inflation in Israel has had a minor effect on our business to date. However, our dollar costs in Israel will increase if inflation in Israel exceeds the devaluation of the NIS against the dollar or if the timing of this devaluation lags behind inflation in Israel. As of December 31, 2002, the majority of our net monetary assets were denominated in dollars and the remainder was denominated mainly in NIS. Net monetary assets that are not denominated in dollars or dollar-linked NIS are affected by the risk of currency fluctuations.

Based upon historical US dollar currency movement, the Company does not believe that reasonably possible near-term changes in the US dollar currency of 10% will result in a material effect on future earnings, financial position or cash flows of the Company.

In 2001, the Company entered into several currency-forward transactions (NIS/dollar) of approximately $8.8 million with settlement dates ranging from January to June 2002, designed to reduce cash-flow exposure to the impact of exchange-rate fluctuations on firm commitments of approximately $12 million. In accordance with SFAS 133 the Company recorded in 2001 an unrealized decrease of $212 in fair market value in other comprehensive loss . The corresponding liability was separately reported as fair market value of forward contracts within other current liabilities . In 2002 this decrease was charged to operations on the relevant settlement dates.

In 2002, the Company did not enter into currency-forward transactions (NIS/dollar). The Company did enter into currency-put options transactions to insure (NIS/dollar) rate in 2002. The total accumulated sum insured in the year was approximately $4 million, and the results of these transactions did not have, as expected, material effect on the operational results of the Company.

Item 12. Description of Securities Other than Equity Securities

Not applicable.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modification to the Rights of Security Holders and Use of Proceeds

The effective date of the Securities Act registration statement for which use of proceeds is being disclosed is April 11, 2000. The commission file number assigned to that registration statement is 333-11640.

The managing underwriters for the offering were Chase-H&Q, SG Cowen and Needham & Company, Inc.

We sold 3,000,000 ordinary shares for consideration of $54 million. The net proceeds amounted to $49.2 million. As of March 31, 2003, approximately $11.5 million of the net proceeds had been used for working capital requirements and $2.5 million for capital expenditures.

Item 15

Evaluation of disclosure controls and procedures

Within 90 days prior to the date of this report (the Evaluation Date), the Company s President and Chief Executive Officer and Chief Financial Officer evaluated the effectiveness of the our disclosure controls and procedures (as defined in the Securities Exchange Act of 1934 Rules 13a-14(c) and 15d-14(c)). Based on that evaluation, these officers have concluded that, as of the Evaluation Date, the Company s disclosure controls and procedures were effective.

Changes in internal controls

There were no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the Evaluation Date.

Item 16

Reserved.

PART III

Item 17. Financial Statements

See pages F-1 through F-23

Item 18. Financial Statements

Not applicable.

Item 19. Exhibits

Number	Description
1.1	Articles of Association (incorporated by reference to exhibit 3.1 to the Company s Registration Statement on Form F-1 (registration number 333-11640))
1.2	First Amendment to the Company s Articles of Association (incorporated by reference to the Company s Current Report on Form 6-K filed on June 4, 2002)

Number	Description
4.1	1997 Stock Option Plan (Plan 2) (incorporated by reference to exhibit 10.1 to the Company s Registration Statement on Form F-1 (registration number 333-11640))
4.2	Option Plan 3 (incorporated by reference to exhibit 10.2 to the Company s Registration Statement on Form F-1 (registration number 333-11640))
4.3	Option Plan 4A and 4B (incorporated by reference to exhibit 10.3 to the Company s Registration Statement on Form F-1 (registration number 333-11640))
4.4	Option Plan 5 (incorporated by reference to Exhibit 4.4 to the Company s Annual Report for 20-F for 2002 filed May 9, 2002
4.5	Option Plan 6 (incorporated by reference to Exhibit 4.1 to the Company s Registration Statement on Form S-8 filed December 24, 2002 (registration number 333-102193))
4.6	Employment Agreement between Nova and Giora Dishon (incorporated by reference to exhibit 10.4 to the Company s Registration Statement on Form F-1 (registration number 333-11640))

4.7	Employment Agreement between Nova and Moshe Finarov (incorporated by reference to exhibit 10.6 to the Company s Registration Statement on Form F-1 (registration number 333-11640))
4.8	Employment Agreement between Nova and Chai Toren (incorporated by reference to exhibit 10.7 to the Company s Registration Statement on Form F-1 (registration number 333-11640))
4.9	Employment Agreement between Nova and Ronen Frish (incorporated by reference to exhibit 10.8 to the Company s Registration Statement on Form F-1 (registration number 333-11640))
4.10	Agreements between Nova and the Office of the Chief Scientist in Israel (incorporated by reference to exhibit 10.10 to the Company s Registration Statement on Form F-1 (registration number 333-11640))
4.11	Certificate of Approval from the Investment Center in Israel (incorporated by reference to exhibit 10.11 to the Company s Registration Statement on Form F-1 (registration number 333-11640))
4.12	Lease Agreement between Nova and Ef-Shar Ltd. (incorporated by reference to Exhibit 4.14 to the Company s Annual Report on Form 20-F filed on May 9, 2002)
4.13	Summary of Lease Agreement between Nova and Ef-Shar Ltd. (incorporated by reference to Exhibit 4.15 to the Company s Annual Report on Form 20-F filed on May 9, 2002)
4.14	Letter Agreement between Barry Cox and the Company dated May 15, 2003 (filed herewith)
4.15	Employee Stock Purchase Plan 1 (incorporated herein by reference to Exhibit 4.1 to the Company s Registration Statement on Form S-8 filed on March 24, 2003 (File No. 33-103981))
4.16	Letter of Indemnification and Exculpation for certain directors, officers and/or employees (incorporated herein by reference Annex A to the Company s Current Report on Form 6-K filed on October 8, 2002)
8	List of Subsidiaries (filed herewith)
12.1	Consent of Brightman Almagor (filed herewith)
12.2	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
12.3	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)

Signatures

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant certifies that it meets all of the requirements for filing on Form 20-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized.

NOVA MEASURING INSTRUMENTS, LTD.

By: /s/ Giora Dishon

Giora Dishon
President

Date: June 25, 2003

CERTIFICATION

I, Giora Dishon, certify that:

1. I have reviewed this annual report on Form 20-F of Nova Measuring Instruments, Ltd.

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant s other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

a. designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

b. evaluated the effectiveness of the registrant s disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the Evaluation Date); and

c. presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant s other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant s auditors and the audit committee of registrant s board of directors (or persons performing the equivalent function):

a. all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant s ability to record, process, summarize and report financial data and have identified for the registrant s auditors any material weakness in internal controls; and

b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant s internal controls; and

6. The registrant s other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: June 25, 2003

/s/ Giora Dishon

Giora Dishon
Chief Executive Officer

CERTIFICATION

I, Chai Toren, certify that:

1. I have reviewed this annual report on Form 20-F of Nova Measuring Instruments, Ltd.

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant s other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

a. designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

b. evaluated the effectiveness of the registrant s disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the Evaluation Date); and

c. presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant s other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant s auditors and the audit committee of registrant s board of directors (or persons performing the equivalent function):

a. all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant s ability to record, process, summarize and report financial data and have identified for the registrant s auditors any material weakness in internal controls; and

b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant s internal controls; and

6. The registrant s other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: June 25, 2003

/s/ Chai Toren

Chai Toren
Chief Financial Officer

NOVA MEASURING INSTRUMENTS LTD.

CONSOLIDATED FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2002

NOVA MEASURING INSTRUMENTS LTD.

CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2002

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INDEPENDENT AUDITORS REPORT
TO THE SHAREHOLDERS OF
NOVA MEASURING INSTRUMENTS LTD.

We have audited the accompanying consolidated balance sheets of Nova Measuring Instruments Ltd. (the Company) and its subsidiaries as of December 31, 2002 and 2001, and the related consolidated statements of operations, shareholders equity and comprehensive loss and cash flows for each of the three years in the period ended December 31, 2002. These financial statements are the responsibility of the Company s 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 the Company s 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 consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company and its subsidiaries as of December 31, 2002 and 2001, and their consolidated results of operations and their consolidated cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.

/s/ Brightman Almagor & Co.

Brightman Almagor & Co.
Certified Public Accountants (Israel)
A member of Deloitte Touche Tohmatsu
Tel Aviv, Israel
February 27, 2003

NOVA MEASURING INSTRUMENTS LTD.
CONSOLIDATED BALANCE SHEETS
(In thousands, except share data)

	As of December 31,	
	2002	**2001**
CURRENT ASSETS		

Cash and cash equivalents	$ 36,964	$ 34,468
Short-term interest-bearing bank deposits	622	-
Available for sale securities	-	6,984
Held to maturity securities	994	7,214
Trade accounts receivable (no allowance for doubtful accounts)	2,663	1,673
Inventories (Note 3)	3,150	4,313
Other current assets	1,137	1,389
	45,530	56,041
LONG-TERM ASSETS		
Severance pay funds (note 6)	1,701	1,545
Fixed assets, net (Note 4)	1,777	1,978
	3,478	3,523
Total assets	$ 49,008	$ 59,564
CURRENT LIABILITIES		
Trade accounts payable	$ 3,340	$ 2,687
Other current liabilities (Note 5)	7,616	7,825
	10,956	10,512
LONG-TERM LIABILITIES		
Liability for employee termination benefits (Note 6)	2,162	2,046
Other long-term liability (Note 9)	213	-
	2,375	2,046
COMMITMENTS AND CONTINGENCIES (Note 7)		
SHAREHOLDERS EQUITY (Note 8)		
Ordinary shares, NIS 0.01 par value - authorized 40,000,000 and 38,900,000 shares respectively, issued and outstanding 14,929,867 and 14,627,113 shares, respectively	46	43
Deferred shares, NIS 0.01 par value - authorized 0 and 1,100,000 shares, respectively, issued and outstanding 0 and 1,057,021 shares, respectively	-	3
Additional paid-in capital	72,614	72,774
Deferred stock-based compensation	(809)	(2,073)
Accumulated other comprehensive loss	-	(524)
Accumulated deficit	(36,174)	(23,217)
Total shareholders equity	35,677	47,006
Total liabilities and shareholders equity	$ 49,008	$ 59,564

The accompanying notes are an integral part of the consolidated financial statements.

NOVA MEASURING INSTRUMENTS LTD.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share data)

	Year ended December 31,		
	2002	**2001**	**2000**
REVENUES:			
Product sales	$ 14,506	$ 14,735	$ 41,931
Services	5,865	6,436	6,532
	20,371	21,171	48,463
COST OF REVENUES:			
Product sales	6,752	9,175	17,558
Services	6,601	7,295	5,920
	13,353	16,470	23,478
GROSS PROFIT	7,018	4,701	24,985
OPERATING EXPENSES			
Research and development expenses, net of participation by the OCS of $1,679, $1,839 and $1,989, respectively (Note 7)	9,894	13,253	13,878
Technology for use in research and development (Note 9)	1,478	-	-
Sales and marketing expenses	6,950	6,852	7,998
General and administrative expenses	1,797	3,032	3,186
Other operating expenses (Note 10)	-	1,025	-
	20,119	24,162	25,062
OPERATING LOSS	(13,101)	(19,461)	(77)
INTEREST AND OTHER NON- OPERATING INCOME (net of related expenses of $30, $32 and $78, respectively)	144	2,587	2,858
NET INCOME (LOSS) FOR THE YEAR	$ (12,957)	$ (16,874)	$ 2,781
EARNINGS (LOSS) PER SHARE (NOTE 11)			
Basic earnings(loss) per share	$ (0.88)	$ (1.16)	$ 0.20
Diluted earnings per share			$ 0.19
Shares used in calculation of basic earnings (loss) per share	14,786	14,578	13,580
Shares used in calculation of diluted earnings per share			14,691

The accompanying notes are an integral part of the consolidated financial statements.

NOVA MEASURING INSTRUMENTS LTD.
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS EQUITY
(In thousands)

	Share capital								
	Ordinary shares	Ordinary A-E shares	Preferred shares	Deferred shares	Additional Paid-in capital	Deferred stock-based compensation	Accumulated other comprehensive loss	Accumulated deficit	Total
Balance as of January 1, 2000	$ 21	$ -	$ 14	$ 3	$ 19,163	$ (1,801)	$ -	$ (9,124)	$ 8,276
Conversion of preferred shares into ordinary shares	14		(14)						-
Initial public offering of ordinary shares (Note 1)	8				49,192				49,200
Issuance of employee share options					4,864	(4,864)			-
Amortization of deferred stock-based compensation						2,362			2,362
Net income for the year								2,781	2,781
Balance as of December 31, 2000	$ 43	$ -	$ -	$ 3	$ 73,219	$ (4,303)	$ -	$ (6,343)	$ 62,619
Exercise of employee share options	(*) -				8				8
Amortization of deferred stock-based compensation						1,777			1,777
Forfeiture of employee share options					(453)	453			-
Decrease in fair market value of derivatives							(212)		(212)
Unrealized losses on investments							(312)		(312)
Loss for the year								(16,874)	(16,874)
Total comprehensive loss									**(17,398)**
Balance as of December 31, 2001	$ 43	$ -	$ -	$ 3	$ 72,774	$ (2,073)	$ (524)	$ (23,217)	$ 47,006
Exercise of employee share options	(*) -				31				31
Amortization of deferred stock-based compensation						1,073			1,073
Forfeiture of employee share options					(191)	191			-
Realization of losses on derivatives							212		212
Realization of losses on investments							312		312
Conversion of deferred shares into ordinary shares	3			(3)					
Loss for the year								(12,957)	(12,957)
Total comprehensive loss									**(12,433)**
Balance as of December 31, 2002	$ 46	$ -	$ -	$ -	$ 72,614	$ (809)	$ -	$ (36,174)	$ 35,677

(*) Less than $1

The accompanying notes are an integral part of the consolidated financial statements.

NOVA MEASURING INSTRUMENTS LTD.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year ended December 31,		
	2002	**2001**	**2000**
CASH FLOWS - OPERATING ACTIVITIES			
Net income (loss)	$ (12,957)	$ (16,874)	$ 2,781
Adjustments to reconcile net income (loss) to net cash used in operating activities Schedule A	5,046	11,126	(6,435)
Net cash - operating activities	(7,911)	(5,748)	(3,654)
CASH FLOWS - INVESTING ACTIVITIES			
Technology for use in research and development	(1,265)	-	-
Decrease (increase) in deposits	(622)	44,410	(44,000)
Proceeds from held to maturity securities	15,167	2,383	-
Investment in held to maturity securities	(8,947)	(9,597)	-
Proceeds from available for sale securities	6,644	-	-
Investment in available for sale securities	-	(7,296)	-
Additions to fixed assets	(601)	(1,141)	(1,170)
Net cash - investing activities	10,376	28,759	(45,170)
CASH FLOWS - FINANCING ACTIVITIES			
Net proceeds from issuance of share capital	-	-	49,200
Stock issued under employee stock option plans	31	8	-
Net cash - financing activities	31	8	49,200
Increase in cash and cash equivalents	2,496	23,019	376
Cash and cash equivalents - beginning of year	34,468	11,449	11,073
Cash and cash equivalents - end of year	$ 36,964	$ 34,468	$ 11,449

SUPPLEMENTAL SCHEDULE OF CASH FLOW INFORMATION:

Taxes paid	$ 53	$ 62	$ 80

The accompanying notes are an integral part of the consolidated financial statements.

NOVA MEASURING INSTRUMENTS LTD.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

SCHEDULE A - ADJUSTMENTS TO RECONCILE NET INCOME (LOSS) OT NET CASH USED IN OPERATING ACTIVITIES

	Year ended December 31,		
	2002	**2001**	**2000**
Income and expense items not involving cash flows:			
Depreciation	$ 802	$ 937	$ 683
Interest on short-term interest-bearing deposit	-	-	(410)
Loss from realization of available for sale securities	652	-	-
Technology for use in research and development	1,478	-	-
Amortization of deferred stock-based compensation	1,073	1,777	2,362
Increase (decrease) in liability for employee termination benefits, net	(40)	76	246
	3,965	2,790	2,881
Changes in assets and liabilities:			
Decrease (increase) in trade accounts receivable	(990)	14,261	(12,841)
Decrease (increase) in other current assets	252	552	(1,354)
Decrease (increase) in inventories	1,163	776	(1,202)
Increase (decrease) in trade accounts payable	653	(5,364)	5,366
Increase (decrease) in other current liabilities	3	(1,889)	715
	1,081	8,336	(9,316)
	$ 5,046	$ 11,126	$ (6,435)

The accompanying notes are an integral part of the consolidated financial statements.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands)

NOTE 1 - GENERAL

A. **Business Description**

Nova Measuring Instruments (the Company) was incorporated in May 1993 and commenced operations in October 1993 in the design, development and production of integrated process control systems, used in the manufacturing of semiconductors. In October 1995, the Company began manufacturing and marketing its systems. In addition, the Company is continuing research and development for the next generation of its products and additional applications for such products. The Company operates in one operating segment.

The Company has wholly owned subsidiaries in the United States of America (the U.S.), Japan, The Netherlands and Taiwan. All companies (the subsidiaries) are engaged in pre-sale activities and providing technical support to customers.

The industry in which the Company operates is characterized by rapid technological development in a competitive environment. Substantially most of the Company s current sales are derived from a single product line for usage exclusively by the semiconductor industry, whose business is highly cyclical. The Company depends on a limited number of suppliers, and at times a sole supplier. Any disruption or termination of the suppliers operations may adversely affect the Company s production capabilities. In addition, many of the Company s development projects are in the early stages and there can be no assurance that these projects will be successful.

B. **Initial Public Offering**

On April 10, 2000, the Company concluded an initial public offering (IPO) of 3,000,000 newly issued ordinary shares. The ordinary shares are traded on the NASDAQ National Market System. Total gross proceeds from the offering were $54,000 and net proceeds, after deduction of offering expenses and underwriting commissions, amounted to $49,200.

C. **Use of Estimates**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands)

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared in accordance with generally accepted accounting principles (GAAP) in the United States of America.

The following is a summary of the significant accounting policies, which were applied in the preparation of these financial statements, on a consistent basis:

A. **Financial Statements in U.S. Dollars**

The currency of the primary economic environment in which the operations of the Company and its subsidiaries are conducted is the U.S. dollar (the dollar). Accordingly, the Company uses the dollar as its functional and reporting currency. Certain of the dollar amounts in the financial statements may represent the dollar equivalent of other currencies, including the New Israeli Shekel (NIS), and may not be exchangeable for dollars.

Transactions and balances denominated in dollars are presented at their dollar amounts. Non-dollar transactions and balances are remeasured into dollars in accordance with the principles set forth in Statement of Financial Accounting Standards (SFAS) No. 52, Foreign Currency Translation, of the Financial Accounting Standards Board (FASB). Net financing income includes translation gains (losses), which were immaterial for all years presented.

B. **Principles of Consolidation**

The Company s financial statements include the financial statements of the Company and its subsidiaries (the Group) after elimination of material intercompany transactions and balances.

C. **Cash and Cash Equivalents**

Cash and cash equivalents are comprised of cash and demand deposits in banks and other short-term, highly liquid investments (primarily interest-bearing time deposits) with maturity dates not exceeding three months from the date of deposit.

D. **Allowance for Doubtful Accounts**

The allowance for doubtful accounts is recorded on the specific identification basis. No allowance was deemed necessary by management.

E. **Available for Sale Securities**

Marketable securities available for sale include investments in debt securities that are not classified as securities held to maturity and equity securities. Unrealized holding gains and losses are excluded form earnings and reported as other comprehensive income in shareholders equity, until realized.

F. **Held to Maturity Securities**

Securities held to maturity include investments in debt securities that the Company has positive intent and ability to hold to maturity. Securities held to maturity are measured at amortized cost.

NOTE 2 -SIGNIFICANT ACCOUNTING POLICIES (Cont.)

G. **Inventories**

Inventories are presented at the lower of cost or market. Cost is determined as follows:
Raw materials - on the average cost basis.
Finished products and work in process - at actual cost (materials, labor and indirect manufacturing costs).

H. **Fixed assets**

Fixed assets are presented at cost, net of accumulated depreciation.
Annual depreciation is calculated based on the straight-line method over the shorter of the estimated useful lives of the related assets or terms of the related leases. Annual depreciation rates are as follows:

	%
Electronic equipment	20-33
Office furniture and equipment	6-15
Leasehold improvements	17-25

In accordance with SFAS No. 144, Accounting for Impairment or Disposal of Long-Lived Assets of the FASB, which supercedes SFAS No. 121, Management reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable based on estimated future undiscounted cash flows. If so indicated an impairment loss would be recognized for the difference between the carrying amount of the asset and its fair value.

I. **Accrued Warranty Costs**

Accrued warranty costs are calculated in respect of the warranty period on the Company s products (generally one year) and are based on the Company s prior experience and in accordance with management s estimate.

J. **Revenue Recognition**

The Company recognizes revenues upon the shipment of its products to the customer or provision of support service provided that persuasive evidence of an arrangement exists, title has transferred, the price is fixed, collection of resulting receivables is probable and there are no remaining significant obligations.

K. **Research and Development**

Research and development costs are charged to operations as incurred. Amounts received or receivable from the Government of Israel through the Office of the Chief Scientist (OCS) as its participation in certain research and development projects are offset against the Company s research and development costs.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands)

NOTE 2 -SIGNIFICANT ACCOUNTING POLICIES (Cont.)

L. **Income Taxes**

The Group accounts for income taxes utilizing the asset and liability method in accordance with SFAS No. 109, Accounting for Income Taxes of the FASB. Current tax liabilities are recognized for the estimated taxes payable on tax returns for the current year. Deferred tax liabilities or assets are recognized for the estimated future tax effects attributable to temporary differences between the income tax bases of assets and liabilities and their reported amounts in the financial statements, and for tax loss carryforwards. Measurement of current and deferred tax liabilities and assets is based on provisions of enacted tax laws, and deferred tax assets are reduced, if necessary, by the amount of tax benefits, the realization of which is not considered likely based on available evidence.

M. **Stock-Based Compensation**

The Group accounts for employee stock-based compensation in accordance with Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to

Employees and in accordance with FASB Interpretation No. 44. Pursuant to these accounting pronouncements, the Group records compensation for stock options granted to employees over the vesting period of the options based on the difference, if any, between the exercise price of the options and the market price of the underlying shares at that date. With respect to variable awards, changes in the market price of the underlying shares at each balance sheet date affect the aggregate amount of compensation recorded. Deferred compensation is amortized to compensation expense over the vesting period of the options. See below for pro forma disclosures required in accordance with SFAS No. 123, Accounting for Stock-Based Compensation , as amended by SFAS 148.

Pro forma Loss Per Share According to SFAS 123 and SFAS 148:

For purposes of estimating fair value in accordance with SFAS 123, the Company utilized the Black-Scholes option-pricing model. The following assumptions were utilized in such calculations for the years 2002, 2001 and 2000 (all in weighted averages):

	2002	2001	2000
Risk-free interest rate	1.5%	4.25%	6.5%
Expected life of options	7 years	7 years	7 years
Expected weekly volatility	90%	105%	89%
Expected dividend yield	none	none	none

Had compensation cost for the Company s stock option plans been determined based on fair value at the grant dates for all awards made in 2002, 2001 and 2000 in accordance with SFAS 123, as amended by SFAS 148, the Company s pro forma loss per share would have been as follows:

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

NOTE 2 -SIGNIFICANT ACCOUNTING POLICIES (Cont.)

M. Stock-Based Compensation (Cont.)

	2002	2001	2000
Pro forma Net income (loss)			
Net income (loss) for the year, as reported	$(12,957)	$(16,874)	$ 2,781
Deduct stock-based compensation determined under APB-25	1,073	1,777	1,356
Add - stock-based compensation determined under SFAS 123	(2,265)	(3,477)	(2,390)
Pro forma net income (loss)	$(14,149)	$(18,574)	$ 1,747
Pro forma earning (loss) per share			
Basic - as reported	$ (0.88)	$ (1.16)	$ 0.20
Basic - pro forma	$ (0.96)	$ (1.27)	$ 0.13
Diluted as reported			$ 0.19

Diluted pro forma	$ 0.12

N. Earnings (Loss) per Share

Earnings (loss) per share are presented in accordance with SFAS 128 of the FASB, Earnings per Share. Pursuant to this standard, basic earnings (loss) per share exclude the dilutive effects of convertible securities and are computed by dividing income (loss) available to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted earnings (loss) per share reflect the potential dilutive effect of all convertible securities. Due to the anti-dilutive effect, basic loss per share was equal to diluted loss per share for years 2002 and 2001. The number of potentially dilutive securities excluded from diluted earnings per share due to the anti-dilutive effect amounted to 2,093,767 and 1,825,615 in 2002 and 2001, respectively.

Retroactive recognition has been given in the calculation of basic earning (loss) per share to shares issued for nominal consideration prior to the Company s initial public offering.

O. Derivative Financial Instruments

SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities as amended in June 2000 by SFAS No. 138, Accounting for Certain Derivative Instruments and Certain Hedging Activities , requires, principally, the presentation of all derivatives as either assets or liabilities on the balance sheet and the measurement of those instruments at fair value. Gains and losses resulting from changes in the fair values of derivative instruments would be accounted for depending on the use of the derivative and whether it qualifies for hedge accounting.

See Note 15 for disclosure of the derivative financial instruments in accordance with such pronouncements.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands)

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

P. New Accounting Pronouncements

1) In June 2002, the FASB issued Statement of Financial Accounting Standards No. 146 Accounting for Costs Associated with Exit or Disposal Activities . SFAS No. 146 requires that a liability for costs associated with an exit or disposal activity be recognized only when the liability is incurred, rather than at the date of an entity s commitment to an exit plan. SFAS 146 requires that the liability be initially measured at fair value. SFAS No. 146 is effective for exit or disposal activities that are initiated after December 31, 2002. Management does not expect that adoption of SFAS No. 146 to have material impact on its financial statements.

2) In November 2002, FASB Interpretation No. (FIN) 45, Guarantor s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others was issued. This interpretation requires elaborating on the disclosures that must be made by a guarantor in its interim and annual financial statements about its obligations under certain guarantees that it has issued. It also clarifies that a guarantor is required to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. The disclosure requirements of this interpretation are effective for statements issued after December 15, 2002 and its recognition requirements are applicable for guarantees issued or modified after December 31, 2002. Management does not expect that adoption of FIN 45 will have material impact on its financial

statements.

3) In December 2002, the FASB issued Statement of Financial Accounting Standards Board No. 148, Accounting for Stock-Based Compensation Transition and Disclosure an amendment of FASB Statement No. 123 (SFAS 148). SFAS 148 amends SFAS No. 123 to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS 148 amends the disclosure requirements of SFAS 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The Company has followed the prescribed format and has provided the additional disclosures required by SFAS 148 in these financial statements for the periods presented (see Note 2M), and will also provide the disclosures in its quarterly reports containing condensed financial statements for interim periods beginning with the quarterly period ending March 31, 2003.

4) In September 2002, the EITF issued EITF 00-21, Accounting for Revenue Arrangements with Multiple Deliverables. The scope of EITF 00-21 deals with how a company should recognize revenue when it sells multiple products or services to a customer as part of an overall solution. For example, a company may sell its customer hardware, installation services, training and support as part of an overall solution. EITF 00-21 provides a framework for determining whether various elements in these types of arrangements involving multiple deliverables should be recognized as each element is delivered or whether amounts should be combined with other undelivered elements and recognized as a single unit.

In general, EITF 00-21 provides the following broad criteria for recognizing revenue in multiple element arrangements: (i) Revenue should be recognized separately for separate units of accounting; (ii) revenue for a separate unit of accounting should be recognized only when the arrangement consideration is reliably measurable and the earnings process is complete; (iii) consideration should be allocated among separate units of measure of accounting in an arrangement based on their relative fair values.

The Company is currently evaluating the impact the adoption of EITF 00-21 will have on its financial position and results of operations.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands)

NOTE 3 - INVENTORIES

A.

	December 31,	
	2002	**2001**
Raw materials	$ 1,255	$ 1,271
Work in process	1,754	2,669
Finished goods	141	373

$ 3,150	$ 4,313

B. In the years ended December 31, 2002 and 2001 the Company wrote down inventory in the amounts of $325 and $2,188, respectively. Total write-downs as of December 31, 2002 and 2001 were $3,525 and $3,200, respectively.

NOTE 4 - FIXED ASSETS

	December 31,	
	2002	**2001**
Cost:		
Electronic equipment	$ 3,283	$ 2,953
Office furniture and equipment	403	398
Leasehold improvements	1,716	1,450
	5,402	4,801
Accumulated depreciation:		
Electronic equipment	2,609	2,105
Office furniture and equipment	194	145
Leasehold improvements	822	573
	3,625	2,823
Net book value	$ 1,777	$ 1,978

The depreciation expenses amounted to $802, $937 and $683 for 2002, 2001 and 2000, respectively.

NOTE 5 - OTHER CURRENT LIABILITIES

A.

	December 31,	
	2002	**2001**
Accrued salaries and fringe benefits	$ 1,580	$ 1,639
Accrued warranty costs (See B below)	2,276	2,258
Governmental institutions (Note 7A)	2,664	2,172
Fair market value of forward contracts (Note 15B)	-	212
Other	1,096	1,544
	$ 7,616	$ 7,825

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands)

NOTE 5 - OTHER CURRENT LIABILITIES (Cont.)

B. Accrued warranty costs:

	December 31,	
	2002	**2001**
Balance as of beginning of year	$ 2,258	$ 4,171
Services provided under warranty	(1,228)	(3,765)
Changes in provision	1,246	1,852
Balance as of end of year	$ 2,276	$ 2,258

NOTE 6 - ACCRUED SEVERANCE PAY

Israeli law and labor agreements determine the obligations of the Company to make severance payments to dismissed employees and to employees leaving employment under certain other circumstances. The obligation for severance pay benefits, as determined by Israeli law, is based upon length of service and the employee s most recent salary. The liability is partially covered through insurance policies purchased by the Company and deposits in a severance fund.

Severance-pay expense amounted to $381, $543 and $629 for 2002, 2001 and 2000, respectively.

NOTE 7 - COMMITMENTS AND CONTINGENT LIABILITIES

A. The Company has received grants in the aggregate amount of $5,777 from the OCS, as its participation of up to 50% of certain development costs. In consideration for such grants, the Company has undertaken to pay royalties amounting to 3%-6% of the net sales of products developed from the projects financed, not to exceed 100% of the grants received. Refund of the grants thereon is contingent on future sales and the Company has no obligation to refund grants if sufficient sales are not generated. Royalty expense amounted to $722, $731, and $1,697 for the years 2002, 2001 and 2000, respectively. The balance of the contingent liability to the OCS as of December 31, 2002 was approximately $695.

B. The Group rents its facilities under various operating lease agreements, which expire on various dates, the latest of which is in 2007. The minimum rental payments are as follows:

Year	Amount (US dollars)
2003	930
2004	1,126
2005	975
2006	820
2007	805

Rental expense for the facilities amounted to $884, $881 and $475 for the years 2002, 2001 and 2000, respectively.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

NOTE 7 - COMMITMENTS AND CONTINGENT LIABILITIES (Cont.)

C. The Company leases vehicles under various operating lease agreements, which expire on various dates, the latest of which is in 2005. The minimum rental payments are as follows:

Year	Amount (US dollars)
2003	504
2004	504
2005	480

Vehicle lease expense amounted to $665, $757 and $541 for the years 2002, 2001 and 2000, respectively.

D. A major customer who was a related party until August 2001 (the Related Party), has notified the Company that a lawsuit has been filed against him by a third party. The suit alleges that the Related Party, while using the Company s products, has infringed upon numerous U.S. patents owned by the third party. According to the agreement between the Company and the Related Party, the Company is to assume responsibility and to indemnify the Related Party for any losses with regard to such suit. The Company is unable to determine at this time with any certainty the ultimate outcome of the aforementioned issue and its effect, if any, on the Company s financial condition, operating results and business.

E. On February 2002 the Company signed a technology-license agreement, according to which the Company received a patent usage right as well as equipment in exchange for $1,502 and future payments of royalties of 5% of the net revenues of the products developed from the abovementioned technology.

NOTE 8 - SHAREHOLDERS EQUITY

A. Share Capital Transactions

2. In April 10, 2000, the Company conducted an IPO. All the outstanding preferred shares were automatically converted, according to their original terms, into ordinary shares upon the IPO.

3. The ordinary shares of the Company are traded on the NASDAQ National Market System. Since June 2002, the ordinary shares are also traded on the Tel-Aviv Stock Exchange.

4. During 2002 the Company converted 1,057,021 issued and outstanding deferred E shares into 551 ordinary shares, and 1,100,000 authorized deferred E shares into 1,100,000 authorized ordinary shares.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

NOTE 8 - SHAREHOLDERS EQUITY (Cont.)

B. Rights of Shares

Holders of ordinary shares are entitled to participate equally in the payment of cash dividends and bonus shares (stock dividends) and, in the event of the liquidation of the Company, in the distribution of assets after satisfaction of liabilities to creditors. Each ordinary share is entitled to one vote on all matters to be voted on by shareholders.

C. Share Option Plans

As of December 31, 1998, the Company had two employee share option plans. The plans provide for the grant of options to employees (including senior management) to purchase ordinary shares at exercise prices equal to the par value of the ordinary shares. Pursuant to the plans the terms of the options granted may not exceed 7 years from the date of grant.

In 1999, the Company s Board approved the third and fourth employee share option plans. The options vest over a period of between one and four years and their term may not exceed 7 years from the date of grant. The third plan consists of 387,000 options, all of which were granted in 1999. Such options entitle the grantees to purchase ordinary shares at an exercise price of $3.17 per share. The fourth plan consists of 1,000,000 options, 668,350 of which were granted in 2000. Such options entitle the grantees to purchase ordinary shares at an exercise price of between $6.27 and $7.37 per share.

In March 1999, the Company s board approved the grant of options to a related party. Such options entitle the grantees to purchase 116,272 ordinary shares, at an exercise price of $5.16 per share. The above options vested upon the IPO.

In September 2001, the Company s Board approved the fifth employee share option plan. The options vest over a period of between one and four years and their term may not exceed 7 years from the date of grant. The plan consists of 746,500 options, entitling the grantees to purchase ordinary shares at an exercise price that equals the market price of the share at the date of the grant. As of December 31 2001, 700,000 options were granted under this plan at an exercise price of $2.46 per share. Under the fifth employee share option plan the Company granted in July 2002, 8,000 options at an exercise price of $2.17 per share and in November 2002, 38,500 options at an exercise price of $1.13 per share. As of December 31 2002, 746,500 options were granted under this plan.

In December 2001, the Company s Board approved the grant of options to its directors, under the terms set forth in the Company s fifth options plan. Such options entitle the grantees to purchase 75,000 ordinary shares, at an exercise price of $ 3.69 per share.

In September 5, 2002 the Company s Board approved the sixth employee share option plan. The options vest over a period between one and three years and their term may not exceed 7 years from the date of grant. The plan consists of 940,000 options (including 30,000 options designated to related parties), entitling the grantees to purchase ordinary shares at an exercise price that equals the market price of the share at the date of the grant. The Company is planning to grant these options in the first quarter of 2003.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

NOTE 8 - SHAREHOLDERS EQUITY (Cont.)

C. Share Option Plans (cont.)

Through December 31, 2002, 3,470,822 share options have been issued under the plans, of which 1,338,668 options have been exercised, 155,711 options have been forfeited, 54,041 have been terminated and 1,149,186 options were exercisable as of December 31, 2002.

The weighted average fair value (in dollars) of the options granted during 2002, 2001 and 2000, according to Black-Scholes option-pricing model, amounted to $0.82, $2.21 and $12.18 per option, respectively. Fair value was determined on the basis of the price of the Company s share and prior to the IPO, on the basis of private placements of the Company s equity and on the basis of other available evidence and estimates, as applicable, adjusted for differentials in value attributable to preferential rights in such previous issuances, based on management s estimates.

A summary of the status of the Company s share option plans as of December 31, 2002, 2001 and 2000, as well as changes during each of the years then ended, is presented below:

	2002		2001		2000	
	Share options	Weighted average exercise price	Share options	Weighted average exercise price	Share options	Weighted average exercise price
Outstanding - beginning of year	2,292,132	3.57	1,771,598	3.71	1,151,772	1.60
Granted	46,500	1.31	775,000	2.57	668,350	7.18
Exercised	(294,403)	0.11	(197,862)	0.054	(18,703)	0.025
Terminated	(54,041)	4.78	-	-	-	-
Forfeited	(67,786)	3.96	(56,604)	6.66	(29,821)	2.55
Outstanding year end	1,922,402	3.99	2,292,132	3.57	1,771,598	3.71
Options exercisable at year-end	1,149,186		906,915		681,463	

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

NOTE 8 - SHAREHOLDERS EQUITY (Cont.)

C. Share Option Plans (cont.)

The following table summarizes information about share options outstanding as of December 31, 2002:

Outstanding as of December 31, 2002				Exercisable as of December 31, 2002	
Range of exercise prices	Number outstanding	Weighted average remaining contractual life	Weighted average exercise price	Number exercisable	Weighted average exercise price
(US dollars)		(in years)	(US dollars)		(US dollars)
0.0025	126,123	3.5	0.0025	124,267	0.0025
2.46-3.69	1,110,581	5.4	2.77	539,194	2.94
5.16	116,272	4	5.16	116,272	5.16
6.27-7.37	569,426	4.5	7	369,453	7
	1,922,402			1,149,186	

NOTE 9 - TECHNOLOGY FOR USE IN RESEARCH AND DEVELOPMENT

In February 2002, the Company signed an agreement for the licensing of certain know-how and technology, to be used in one of the Company s specific research and development programs and which has no alternative use. In accordance with the principles set forth in SFAS 2 these costs have been charged to the statement of operations in the year ended December 31, 2002, at the present value of the minimum payments to be made under the agreement.

NOTE 10 - OTHER OPERATING EXPENSES

The amount for the year ended December 31, 2001 represents costs borne by the Company in connection with the breach of part of its operating lease commitments associated with the move to the new premises. Balance payable outstanding as of December 31, 2002 amounts to $340.

NOTE 11 - EARNINGS (LOSS) PER SHARE

Earnings (loss) per share is computed using the weighted-average number of ordinary shares outstanding restated in order to reflect the conversion, upon the IPO, of all preferred shares into ordinary shares described in Note 8A, and assuming the exercise of share options (using the treasury stock method). Diluted earnings per share reflect the potential dilutive effect of all convertible securities.

NOTE 12 - INCOME TAXES

A. Law for the Encouragement of Capital Investments - 1959

In October 1995, the Company was granted approved enterprise status under the tax-exempt benefit track, as provided by the Israeli Law for the Encouragement of Capital Investments - 1959, for an investment program in the aggregate amount of $732. The Company had completed the investments under the program, which received the approval of the Investments Center. The tax-exempt benefit track provides for a tax exemption on undistributed earnings derived from assets included in the approved enterprise investment program for the first four years of the seven-year benefit period and a 25% tax rate for the remaining three years of the benefit period. Pursuant to the tax-exempt benefit track, the Company is liable for tax at a 25% rate on distributions to shareholders of earnings subject to the exemption.

In December 1999, the Company was granted another approved enterprise status for an investment expansion program in the aggregate amount of $3,229 (the expansion program). The tax-exempt benefit track provides for a tax exemption on undistributed earnings derived from assets included in the approved enterprise investment program for the first two years of the seven-year benefit period and a 25% tax rate for the remaining five years of the benefit period. Pursuant to the tax-exempt benefit track, the Company is liable for tax at a 25% rate on distributions to shareholders of earnings subject to the exemption.

The Company has not utilized any tax benefits thereof.

The period in which the Company receives the abovementioned tax benefits is limited to seven years from the first year that taxable revenues are generated, and such benefits must be utilized within 12 years from the year that operation (as defined) of the approved enterprise commences, or 14 years from the year the approval is granted, whichever is earlier.

Dividends paid from earnings that benefited from the approved enterprise tax status are subject to a 15% tax to the recipient (for a period of 12 years from the end of the seven-year benefit period), whereas dividends paid out of other earnings are subject to tax to the recipient at the rate of 25% (or lower if paid to a treaty country), except when paid to another Israeli company, in which case such dividends are exempt from tax.

The income of the Company that is not derived from assets, which are eligible for reduced taxation benefits, as described above, is taxed at the statutory rate for Israeli companies, which is 36%.

The above tax benefits are conditioned upon fulfillment of the requirements stipulated by the aforementioned law and the regulations promulgated there under, as well as the criteria set forth in the certificates of approval. In the event of failure by the Company to comply with these conditions, the tax benefits could be canceled, in whole or in part, and the Company would be required to refund the amount of the canceled benefits, plus interest and certain inflation adjustments.

If the investments of non-Israeli investors (as such investments are defined by the Law) will exceed 25% then the seven-year benefit period mentioned above may be extended to ten years. If the investments of non-Israeli investors is 49% or more, then the rate of tax on earnings derived from assets included in the approved enterprise investment program will decrease to 10% - 20%, depending on the level of ownership by non-Israeli investors, examined on a yearly basis.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

NOTE 12 - INCOME TAXES (Cont.)

B. Law for the Encouragement of Industry (Taxation), 1969

The Company is an industrial company under the Law for the encouragement of Industry (Taxation), 1969 and, therefore, is entitled to certain tax benefits, mainly accelerated rates of depreciation.

C. Taxation Under Inflationary Conditions

The Company reports for tax purposes in accordance with the provisions of the Income Tax Law (Adjustments Due to Inflation) - 1985, under which taxable income is measured in terms of NIS adjusted for changes in the Israeli Consumer Price Index.

D. Deferred Taxes

The Company has accumulated losses for Israeli tax purposes as of December 31, 2002 in the amount of approximately $36,000. At such date, other temporary differences were immaterial.

The Israeli tax loss carryforwards have no expiration date. The Company expects that during the period these losses are utilized, its undistributed earnings will be tax exempt. Since the Company has no intention to distribute such earnings, there will be no tax benefit available from such tax losses and no deferred taxes have been included in these financial statements for these losses.

As of December 31, 2002, the subsidiaries had a net operating loss carryforward of approximately $1,300. A valuation allowance in the amount of approximately $520, representing the entire benefit, was recorded regarding such loss.

E. Effective Tax Rates

The Company s effective tax rates differ from the statutory rates applicable to the Company for all years presented due primarily to its approved enterprise status (see A above) and the tax loss carry-forward.

F. Tax Assessments

The Company has not received any final tax assessments since its incorporation.

G. In light of losses for both financial reporting and tax purposes for 2002 and 2001, a reconciliation of the effective income tax rate has not been presented. In 2000, theoretical income taxes on the Company s pre-tax income were primarily reduced by the utilization of tax loss carryforwards from prior years for which a deferred tax asset had not been recorded and reduced tax rates related to approved enterprise.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

NOTE 13 - GEOGRAPHIC AREAS AND MAJOR CUSTOMERS

Sales by geographic area (as percentage of total sales):

	Year ended December 31,		
	2002	**2001**	**2000**
	%	**%**	**%**
USA	61	72	71
Europe -primarily France and Germany	16	13	12
Japan	20	8	2
Other	3	7	15
Total	100	100	100

Sales by major customers (as percentage of total sales):

	Year ended December 31,		
	2002	**2001**	**2000**
	%	**%**	**%**
Customer A	20	8	4
Customer B (the Related Party)	11	17	7
Customer C	-	14	7
Customer D	30	21	47
Customer E	22	3	4

Substantially all fixed assets are located in Israel.

NOTE 14 - TRANSACTIONS AND BALANCES WITH RELATED PARTIES

The total directors fees (including the chairman of the Board) for the year 2002 amounted to $50 (2001 - $146, 2000 -$212).

As to options granted to directors, see Note 8C.

NOVA MEASURING INSTRUMENTS LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

NOTE 15 - FINANCIAL INSTRUMENTS

A. Fair value of financial instruments

A financial instrument is defined as cash, evidence of an ownership interest in an entity, or a contract that impose on one entity a contractual obligation either to deliver cash or receive cash or another financial instrument to or from a second entity. Examples of financial instruments include cash and cash equivalents, marketable securities available for sale, securities held to maturity, trade accounts receivable, loans, investments, trade accounts payable, accrued expenses, options and forward contracts.

At December 31, 2002 and 2001 the fair market value of the Company s financial instruments did not materially differ from their respective book value.

B. Hedging activities

In 2001, the Company entered into several currency-forward transactions (NIS/dollar) of $8,750 with settlement dates ranging from January to June 2002, designed to reduce cash-flow exposure to the impact of exchange-rate fluctuations on firm commitments of $12,000. In accordance with SFAS 133 the Company recorded in 2001 an unrealized decrease of $212 in fair market value in other comprehensive loss . The corresponding liability was separately reported as fair market value of forward contracts within other current liabilities . In 2002 this decrease was charged to operations on the relevant settlement dates.

EXHIBIT INDEX

Exhibit No.	Document Description	Page No.
1.1	Articles of Association (incorporated by reference to exhibit 3.1 to the Company's Registration Statement on Form F-1 (registration number 333-11640))	
1.2	First Amendment to the Company's Articles of Association (incorporated by reference to the Company's Current Report on Form 6-K filed on June 4, 2002)	
4.1	1997 Stock Option Plan (Plan 2) (incorporated by reference to exhibit 10.1 to the Company's Registration Statement on Form F-1 (registration number 333-11640))	
4.2	Option Plan 3 (incorporated by reference to exhibit 10.2 to the Company's Registration Statement on Form F-1 (registration number 333-11640))	
4.3	Option Plan 4A and 4B (incorporated by reference to exhibit 10.3 to the Company's Registration Statement on Form F-1 (registration number 333-11640))	
4.4	Option Plan 5 (incorporated by reference to Exhibit 4.4 to the Company's Annual Report for 20-F for 2002 filed May 9, 2002	
4.5	Option Plan 6 (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-8 filed December 24, 2002 (registration number 333-102193))	
4.6	Employment Agreement between Nova and Giora Dishon (incorporated by reference to exhibit 10.4 to the Company's Registration Statement on Form F-1 (registration number 333-11640))	
4.7	Employment Agreement between Nova and Moshe Finarov (incorporated by reference to exhibit 10.6 to the Company's Registration Statement on	

Exhibit No.	Document Description	Page No.
	Form F-1 (registration number 333-11640))	
4.8	Employment Agreement between Nova and Chai Toren (incorporated by reference to exhibit 10.7 to the Company's Registration Statement on Form F-1 (registration number 333-11640))	
4.9	Employment Agreement between Nova and Ronen Frish (incorporated by reference to exhibit 10.8 to the Company's Registration Statement on Form F-1 (registration number 333-11640))	
4.10	Agreements between Nova and the Office of the Chief Scientist in Israel (incorporated by reference to exhibit 10.10 to the Company's Registration Statement on Form F-1 (registration number 333-11640))	
4.11	Certificate of Approval from the Investment Center in Israel (incorporated by reference to exhibit 10.11 to the Company's Registration Statement on Form F-1 (registration number 333-11640))	
4.12	Lease Agreement between Nova and Ef-Shar Ltd. (incorporated by reference to Exhibit 4.14 to the Company's Annual Report on Form 20-F filed on May 9, 2002)	
4.13	Summary of Lease Agreement between Nova and Ef-Shar Ltd. (incorporated by reference to Exhibit 4.15 to the Company's Annual Report on Form 20-F filed on May 9, 2002)	
4.14	Letter Agreement between Barry Cox and the Company dated May 15, 2003	E-3

	(filed herewith)	
4.15	Employee Stock Purchase Plan 1 (incorporated herein by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-8 filed on March 24, 2003 (File No. 33-103981))	
4.16	Letter of Indemnification and Exculpation for certain directors, officers and/or employees (incorporated herein by reference Annex A to the Company's Current Report on Form 6-K filed on October 8, 2002)	
8	List of Subsidiaries (filed herewith)	E-5
12.1	Consent of Brightman Almagor (filed herewith)	E-6
12.2	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)	E-7
12.3	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)	E-8

Exhibit 4.16

May 15, 2003

Mr. Barry Cox,

Dear Mr. Cox.

Re: Terms of Engagement in the Position of Chairman of the Board of Directors:

This letter establishes the terms of your engagement with Nova Measuring Instruments Ltd. (Nova).

1. Title/Position: You will serve as the Chairman of the Board of Directors (Board) of Nova.

2. Period: As of May 15, 2003 and until May 15, 2004. It is agreed that your services may be terminated at any time within said period according to the sole discretion of Nova s Board of Directors

3. Compensation: Gross payment of 50,000 $ per annum payable in quarterly payments no later than the end of each fiscal quarter.

4. Initial Stock Option Award:

(a) Grant: Effective as of May 15, 2003 Nova shall grant you an option (Option) to purchase 50,000 shares of Nova s Ordinary Shares of 0.01 par value each (the Option and the Common Stock respectively). To remove any doubt, the option is granted to you on a one time basis and Nova shall be under no obligation to grant you any additional options;

(b) Per Share Exercise Price: Fair market value of a single Ordinary Share.

(c) Vesting Period: The aggregate amount of Common Stock purchasable under the Option shall vest over a three year period commencing as of the date hereof so that by the end of each anniversary to your engagement according to this letter you shall be entitled to purchase one third of the aggregate amount of Common Stock Purchasable under the Option. The Option has a fixed term of 10 years from the date of grant.

(d) Termination of Services: To the extent hat your services are terminated for any reason whatsoever other than due to breach of your fiduciary duties to Nova you shall be entitled to exercise that part your Option vested immediately prior to the date of termination by notice to Nova no later than 90 days of said termination. In the event that your services are terminated due to breach of fiduciary duties any part of the Option which is unexercised upon the date to termination shall expire.

5. No Employer Employee Relations: You shall not be deemed to be an Employee of Nova and you shall agree to waive any claim to the contrary, and to indemnify Nova against any damage borne by it in the event that any court of law, quasi-judicial authority or any other administrative authority determines to the contrary.

6. Restrictive Covenants: You agree that during the term in which your services are provided to Nova and for one year thereafter you will not become associated, whether as principal, partner, employee, consultant or shareholder (other than as a holder of not more than 1% of the outstanding voting shares of any publicly traded company), with any entity that is actively engaged in any geographic area in any business which is in substantial and direct competition with Nova. You further agree that during the term of your employment by Nova and for two years thereafter you will not induce any employee of Nova to be employed or perform services elsewhere. Finally, you agree that during the term in which you provide services to Nova and thereafter (subject to the requirements of legal process) you will hold in confidence all trade secrets, confidential information and proprietary materials of Nova. For the avoidance of doubt proprietary materials of Nova shall include any work product prepared by you during or in relation to your services under this letter however, information and materials shall not be considered to be trade secrets, confidential or proprietary if they (a) have previously been disclosed to the public, or are in the public domain, other than as a result of the your breach of this paragraph 6, or (b) are known or generally available within any trade or industry of Nova.

7. Approvals: Please be advised that under applicable law the terms of your engagement as elaborated in this letter are subject to the approval of Nova s Audit Committee, Board of Directors and the Shareholders general meeting. Nova shall not be liable for failing to obtain such approvals.

8. If the foregoing terms are acceptable to you, please indicate your acceptance and agreement by signing the enclosed copy of this letter and returning it to Nova attn: Dr. Giora Dishon.

Very truly yours,

Nova Measuring Instruments Ltd.

Accepted and Agreed: May 15, 2003

/s/ Barry Cox
Barry Cox

Exhibit 8

List of Subsidiaries

Nova Measuring Instruments Inc.	Delaware, USA
Nova Measuring Instruments K.K	Japan
Nova Measuring Instruments Taiwan Ltd.	Taiwan
Nova Measuring Instruments Netherlands B.V	Netherlands

Exhibit 12.1

Brightman Almagor & Co.

CONSENT OF INDEPENDENT AUDITORS

As independent auditors, we hereby consent to the incorporation by reference of our report dated February 27, 2003 included in Nova s Annual Report on Form 20-F for the fiscal year ended December 31, 2002 into the Form S-8 Registration Statements for Nova Measuring Instruments Ltd., filed with the Securities and Exchange Commission on the following dates: (i) March 5, 2002 (File No. 333-83734); December 24, 2002 (File No. 333-102193); March 24, 2003 (File No. 333-103981).

/s/ Brightman Almagor & Co.
Certified Public Accountants
A member of Deloitte Touche Tohmatsu

Tel Aviv, Israel

June 25, 2003

Exhibit 12.2

CERTIFICATION PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, Giora Dishon, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. This Annual Report on Form 20-F of Nova Measuring Instruments, Ltd. (the Company) for the period ended December 31, 2002 (the Report) fully complies with the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: June 25, 2003

BY: /S/ Giora Dishon

Giora Dishon
President and Chief Executive Officer

Exhibit 12.3

CERTIFICATION PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, Chai Toren, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. This Annual Report on Form 20-F of Nova Measuring Instruments, Ltd. (the Company) for the period ended December 31, 2002 (the Report) fully complies with the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: June 25, 2003

BY: /S/ Chai Toren

Chai Toren
Chief Financial Officer