

NOVA MEASURING INSTRUMENTS LTD  
Form 6-K  
September 29, 2009

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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

**Washington, DC 20549**

**FORM 6-K**

**REPORT OF FOREIGN PRIVATE ISSUER  
PURSUANT TO RULE 13a-16 OR 15d-16 OF  
THE SECURITIES EXCHANGE ACT OF 1934**

September 29, 2009

Commission File No.: 000-30688

**NOVA MEASURING INSTRUMENTS LTD.**

(Translation of registrant's name into English)

**Building 22 Weizmann Science Park, Rehovot  
P.O.B 266  
Israel**

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F  Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes  No

Attached hereto and incorporated by way of reference herein is a press release issued by the Registrant and entitled "Leading Foundry Selects Nova as Provider of Optical CD for 22/32nm Technology Nodes".

This report on Form 6-K is hereby incorporated by reference into Nova Measuring Instruments Ltd.'s registration statements on Form S-8, filed with the Securities and Exchange Commission on the following dates: September 13, 2000 (File No. 333-12546); March 5, 2002 (File No. 333-83734); December 24, 2002 (File No. 333-102193, as amended by Amendment No. 1, filed on January 5, 2006); March 24, 2003 (File No. 333-103981); May 17, 2004 (three files, File Nos. 333-115554, 333-115555, and 333-115556, as amended by Amendment No. 1, filed on January 5, 2006); March 7, 2005 (File No. 333-123158); December 29, 2005 (File No. 333-130745); September 21, 2006 (File No. 333-137491); and November 5, 2007 (File No. 333-147140) and into Nova Measuring Instruments Ltd.'s registration statement on Form F-3, filed with the Securities and Exchange Commission on May 11, 2007 (File No. 333-142834).

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NOVA MEASURING INSTRUMENTS LTD.  
(Registrant)

Date: September 29, 2009

By: */s/ Dror David*

Dror David  
Chief Financial Officer

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**Company Contact:**

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## **Leading Foundry Selects Nova as Provider of Optical CD for 22/32nm Technology Nodes**

### *Company expects to receive several tool orders in coming quarters*

**REHOVOT, Israel, September 29, 2009** - Nova Measuring Instruments Ltd. (NASDAQ: NVMI) provider of leading edge stand-alone metrology and the market leader of integrated metrology solutions to the semiconductor process control market, today announced that its NovaT500 and NovaMARS® have been selected as the metrology solution of record for both the 22nm and 32nm technology nodes, at one of the world's leading foundries. The selection defines Nova as the sole provider of Stand Alone Optical CD metrology for both back end and front end of line applications including Lithography, Etch, CMP and advanced thin film applications. The Company expects to receive several stand alone tool orders in the coming quarters.

The selection of Nova's metrology solution by one of the world's technology leaders is clear recognition of the technology leadership we have attained in the stand alone Optical CD market over the past few years. Our solution was evaluated against competing technologies over the past 12 months in the most advanced and challenging development environments and was able to cope with the most complicated next generation applications across several key areas of the fab, commented Dr. Boaz Brill, VP Technology Development at Nova.

Winning the support of this particular customer, who is known as a technology leader and an industry benchmark, is of huge strategic value to the Company. With this third major foundry win we further expand our reach into this growing segment, an area where most capital spending is expected to continue in the coming years, commented Gabi Seligsohn, President & CEO at Nova.

The NovaT500 provides extremely high throughput of 250 Wafers Per Hour (13 measurement sites). Based on Nova's patented Normal Incidence Spectral Reflectometry, the NovaT500 redesigned optics, improve metrology precision by 30% over current generation NovaScan 3090Next. This flexible platform allows up to three Measurement Units to be installed on the same tool, providing an easy and cost effective path to upgrades as well as adding other metrology capabilities as they become available. Combined with NovaMARS, advanced application development software, the NovaT500 has the ability to measure fine profile parameters on complex 3D test structures as well as in the device.

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**About Nova:** Nova Measuring Instruments Ltd. develops, produces and markets advanced integrated and stand alone metrology solutions for the semiconductor manufacturing industry. Nova is traded on the NASDAQ & TASE under the symbol NVMI. The Company's website is [www.nova.co.il](http://www.nova.co.il).

*This press release contains forward-looking statements within the meaning of safe harbor provisions of the Private Securities Litigation Reform Act of 1995 relating to future events or our future performance, such as statements regarding trends, demand for our products, expected deliveries, transactions, expected revenues, operating results, earnings and profitability. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied in those forward looking statements. These risks and other factors include but are not limited to: unanticipated consequences of the global economic crisis, our dependency on a single integrated process control product line; the highly cyclical nature of the markets we target; our inability to reduce spending during a slowdown in the semiconductor industry; our ability to respond effectively on a timely basis to rapid technological changes; risks associated with our dependence on a single manufacturing facility; our ability to expand our manufacturing capacity or marketing efforts to support our future growth; our dependency on a small number of large customers and small number of suppliers; risks related to our intellectual property; changes in customer demands for our products; new product offerings from our competitors; changes in or an inability to execute our business strategy; unanticipated manufacturing or supply problems; changes in tax requirements; changes in customer demand for our products; risks related to currency fluctuations; and risks related to our operations in Israel. We cannot guarantee future results, levels of activity, performance or achievements. The matters discussed in this press release also involve risks and uncertainties summarized under the heading "Risk Factors" in Nova's Annual Report on Form 20-F for the year ended December 31, 2008 filed with the Securities and Exchange Commission on March 30, 2009. These factors are updated from time to time through the filing of reports and registration statements with the Securities and Exchange Commission. Nova Measuring Instruments Ltd. does not assume any obligation to update the forward-looking information contained in this press release.*

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