NOVA MEASURING INSTRUMENTS LTD Form 6-K August 03, 2006

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934

For August 3, 2006

Commission File No. 000-30668

NOVA MEASURING INSTRUMENTS LTD.

Building 22 Weitzmann Science Park, P.O.B 266, Rehovoth 76100, Israel

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 x Form 40-F o

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule101(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 the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes O No X

If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): N/A.

Attached hereto as Exhibit 99.1 and incorporated herein by reference is the Registrant s press release regarding its 2006 second quarter results.

This report on Form 6-K is hereby incorporated by reference into the registration statements on Form S-8 filed by Nova Measuring Instruments Ltd., 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); March 24, 2003 (File No. 333-103981); May 17, 2004 (three files, File Nos. 333-115554, 333-115555, and 333-115556); March 7, 2005 (File No. 333-123158); and December 29, 2005 (File No. 333-130745).

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 (the "Registrant")

August 3, 2006

By: /s/ Dror David

Dror David Chief Financial Officer

Exhibit Index

Exhibit 99.1 Registrant s press release regarding its 2006 second quarter results.