February 14, 2006

UNITED STATE

SSECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

Nova Measuring Instruments Ltd.

(Name of Issuer)
Ordinary Shares, Par Value NIS 0.01

(Title of Class of Securities)

M7516K 10 3

(CUSIP NUMBER)

December 31, 2005

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- O Rule 13d-1(b)
- o Rule 13d-1(c)
- x Rule 13d-1(d)

CUSIP No. M7516K 10 3 SCHEDULE 13G

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1.	NAME OF REPORTING PERSONS: DR. MOSHE FINAROV I.R.S. IDENTIFICATION NOS. NOT APPLICABLE					
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) O (b) X					
3.	SEC Use Only					
4.	CITIZENSHIP or PLACE OF ORGANIZATION Israel					
NUN	MBER OF	5.	SOLE VOTING POWER 979,541(1)			
SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		6.	SHARED VOTING POWER			
		7.	SOLE DISPOSITIVE POWER 979,541(1)			
			SHARED DISPOSITIVE POWER			
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 979,541(1)					
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES o					
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 6.2(2)					
12.	TYPE OF REPORTING PERSON IN					

Item 1(a). Name of Issuer:

Nova Measuring Instruments Ltd.

Item 1(b). Address of Issuer's Principal Executive Offices:

Weitzman Scientific Park P.O. Box 266 Rehovot 76100 Israel

Item 2(a). Name of Person Filing:

Dr. Moshe Finarov

Item 2(b). Address of Principal Business Office or, if None, Residence:

c/o Nova Measuring Instruments Ltd. Weitzman Scientific Park P.O. Box 266 Rehovot 76100 Israel

Item 2(c). Citizenship:

Israel.

Item 2(d). Title of Class of Securities:

Ordinary Shares, par value NIS 0.01 per share

Item 2(e). CUSIP Number:

M7516K 103

- Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a: Not Applicable
 - (a) $_{\mathrm{O}}$ Broker or dealer registered under Section 15 of the Exchange Act;
 - (b) O Bank as defined in Section 3(a)(6) of the Exchange Act;
 - (c) O Insurance Company as defined in Section 3(a)(19) of the Exchange Act;

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	(d) O	Investment Company registered under Section 8 of the Investment Company Exchange Act;					
	(e) O	Investment Adviser in accordance with Rule 13d-1(b)(1)(ii)(E);					
	(f) O	e 13d-1(b)(1)(ii)(F);					
	(g) O	Parent Holding Company or Control Person in accordance with Rule 13d-1(b)(1)(ii)(G);					
	(h) O	Saving Association as defined in Section 3(b) of The Federal Deposit Insurance Act;					
	(i) o	Church Plan that is excluded from the definition of an Investment Company under Section 3(c)(14) of the Investment Company Act;					
	(j) o	Group, in accordance	ce with Rule 13d-1(b)(1)(ii)(J).				
Item 4.	Ownership.						
	(a)	Amount beneficiall	y owned:979,541(1)				
(b) Percent of Class: 6.24%(2)							
	(c)	Number of shares a	s to which such person has:				
		(i) Sole power	to vote or direct the vote: 979,541(1)				
		(ii) Shared power	er to vote or to direct the vote: 0				
		(iii) Sole power	to dispose or direct the disposition of: 979,541(1)				
		(iv) Shared power	er to dispose or to direct the disposition of: 0				
Item 5.	15. Ownership of Five Percent or Less of a Class.						
	Not Applicable.						
Item 6.	Ownership	Ownership of More than Five Percent on Behalf of Another Person.					
	Not Applicable.						
Item 7.	Identification Company.	on and Classification o	f the Subsidiary Which Acquired the Security Be	ing Reported on by the Parent Holding			
	Not Applica						
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Item 8.	Identification and Classification of Members of the Group.								
	Not Applicable.								
Item 9. Notice of Dissolution of Group.									
	Not Applicable.								
Item 10.	Certification.								
	Not Applicable.								

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

February, 2006

(Date)

Dr. Moshe Finarov

(Signature)

Dr. Moshe Finarov

(Name/Title)

- (1) Includes 107,600 Ordinary Shares held by a trustee according to the tax laws of Israel and options to which are currently exercisable to purchase additional 225,000 Ordinary Shares.
- (2) The issuer has advised the Reporting Person that as of December 31, 2005 there were 15,457,471 outstanding Ordinary Shares of the issuer. The Reporting Person s Ownership percentage is based on that amount.

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