

NANOMETRICS INC
 Form 4/A
 November 14, 2006

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 Crawford Bruce A

(Last) (First) (Middle)
 1550 BUCKEYE DRIVE
 (Street)

MILPITAS, CA 95035

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
 NANOMETRICS INC [NANO]

3. Date of Earliest Transaction
 (Month/Day/Year)
 11/10/2006

4. If Amendment, Date Original Filed(Month/Day/Year)
 11/14/2006

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

___ Director ___ 10% Owner
 ___X___ Officer (give title below) ___ Other (specify below)
 Chief Operating Officer

6. Individual or Joint/Group Filing(Check Applicable Line)
 ___X___ Form filed by One Reporting Person
 ___ Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)
				(A) or (D)	Price		
Common Stock	11/10/2006		M	V	3,873 \$ 0.49	A	44,718 D
Common Stock	11/10/2006		S	V	3,873 \$ 8.62	D	40,845 D

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Amount or Number of Shares
Incentive Stock Option (right to buy)	\$ 0.49	11/10/2006		M	3,873	(1) 10/16/2010	Common Stock	3,873

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Crawford Bruce A 1550 BUCKEYE DRIVE MILPITAS, CA 95035			Chief Operating Officer	

Signatures

/s/ Quentin Wright,
attorney-in-fact

11/14/2006

**Signature of Reporting Person

Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
 - ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) The option was originally granted under the Accent Optical Technologies, Inc. Stock Incentive Plan (the "Accent Plan"), was assumed by Nanometrics in connection with the merger of Accent Optical with and into Nanometrics and replaced with an option to purchase 3,873 shares of Nanometrics common stock at \$0.49 per share. The option was 100% vested prior to the effective date of the merger.
- (2) Not applicable.

Remarks:

The Reporting Person is amending the Form 4 originally filed on November 14, 2006 for the purposes of including the acquisition of Accent Optical Technologies, Inc.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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