HEATON JOHN DAVIS
Form 4
May 22, 2007

# FORM 4

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

**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

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).

(Print or Type Responses)

1. Name and Address of Reporting Person *
HEATON JOHN DAVIS

(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)
05/17/2007

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

_____ Director _____ 10% Owner
_____ Officer (give title below) __X__ Other (specify below)
Affiliate

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 Indirect Beneficial Ownership (Instr. 4) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Stock | 05/17/2007 | | M | | 1,900 | A | $ 5.7 | 1,900 | D | |
| Common Stock | 05/17/2007 | | S | | 1,900 | D | $ 6.25 | 0 | D | |
| Common Stock | 05/21/2007 | | M | | 16,200 | A | $ 5.7 | 16,200 | D | |
| Common Stock | 05/21/2007 | | S | | 16,200 | D | $ 6.25 | 0 | 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 Amou Underlying Securi (Instr. 3 and 4) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title | Amo Num Shar |
| Non-qualified Stock Option | $ 5.7 | 05/17/2007 | | M | | 1,900 | | 06/17/2004 | 06/17/2010 | Common Stock | 33 |
| Non-qualified Stock Option | $ 5.7 | 05/21/2007 | | M | | 16,200 | | 06/17/2004 | 06/17/2010 | Common Stock | 330 |

# Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---|---|---|---|
| | Director | 10% Owner | Officer | Other |
| HEATON JOHN DAVIS<br>1550 BUCKEYE DRIVE<br>MILPITAS, CA 95035 | | | | Affiliate |

# Signatures

| | |
|---|---|
| John D. Heaton | 05/22/2007 |
| **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).

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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