

Roelofs Nicolas H PHD
 Form 4
 February 24, 2011

FORM 4

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

OMB APPROVAL

OMB Number: 3235-0287
 Expires: January 31, 2005
 Estimated average burden hours per response... 0.5

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 *
 Roelofs Nicolas H PHD

2. Issuer Name and Ticker or Trading Symbol
 AGILENT TECHNOLOGIES INC
 [A]

5. Relationship of Reporting Person(s) to Issuer
 (Check all applicable)

(Last) (First) (Middle)
 5301 STEVENS CREEK BLVD.
 (Street)

3. Date of Earliest Transaction (Month/Day/Year)
 02/22/2011

____ Director _____ 10% Owner
 Officer (give title below) _____ Other (specify below)
 Senior Vice President

SANTA CLARA, CA 95051

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

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

(City) (State) (Zip)

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) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|
| | | | Code | V | Amount | (A) or (D) | Price |
| Common Stock | 02/22/2011 | | M ⁽¹⁾ | | 2,400 | A | \$ 19 |
| Common Stock | 02/22/2011 | | S ⁽¹⁾ | | 2,400 | D | \$ 43.24 |

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

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1474
 (9-02)

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) | Amount or Number of Shares |
|---|--|--------------------------------------|--|--------------------------------|---|--|---|----------------------------|
| Employee Stock Option (Right to Buy) ⁽²⁾ | \$ 19 | 02/22/2011 | | M ⁽¹⁾ | 2,400 | 11/18/2009 ⁽³⁾ 11/17/2018 | Common Stock | 2,400 |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|-----------------------|-------|
| | Director | 10% Owner | Officer | Other |
| Roelofs Nicolas H PHD 5301 STEVENS CREEK BLVD. SANTA CLARA, CA 95051 | | | Senior Vice President | |

Signatures

/s/ Stephen D. Williams, attorney-in-fact for Mr. Roelofs
 **Signature of Reporting Person
 02/24/2011
 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) This transaction was effected pursuant to a Rule 10b5-1 plan.
- (2) Right to buy Agilent Technologies, Inc. common stock granted under the Agilent Technologies, Inc. 1999 Stock Plan, in compliance with Rule 16b-3.
- (3) The option is exercisable in four equal installments beginning on the first anniversary of the date of the grant. The first vesting date is stated.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.