FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| gton, D.C. 20549 | OMB APPROVA |
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|                  |             |

| OMB Number:             | 3235-0287 |  |  |  |  |  |
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| 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).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| Name and Address of Reporting Person*     ENRIQUEZ CABOT JUAN  |     |  |   |                              |   |  |      |  |                                  |               |                |  |   |                           | Relationship of Reporting Person(s) to Issuer (Check all applicable) |   |                     |  |  |  |
|--|-----|--|---|------------------------------|---|--|------|--|----------------------------------|---------------|----------------|--|---|---------------------------|--|---|---------------------|--|--|--|
| ENRIQUEZ CABOT JUAN  |     |  |   |                              |   |  |      |  |                                  |               |                |  |   | X                         | Director   | Director  |                     | 10% Ow   | ner  |  |
| (Last) (First) (Middle) C/O CABOT CORPORATION  |     |  |   |                              | 3. Date of Earliest Transaction (Month/Day/Year) 12/31/2007 |  |      |  |                                  |               |                |  |   | Officer (g<br>below)      | give title   |   | Other (sp<br>below) | pecify   |  |  |
| TWO SEAPORT LANE   |     |  |   | L                            |   |  |      |  |                                  |               |                |  |   |                           |  |   |                     |  |  |  |
|  |     |  |   | 4                            | 4. If Amendment, Date of Original Filed (Month/Day/Year)    |  |      |  |                                  |               |                |  | 6. Individual or Joint/Group Filing (Check Applicable Line) |                           |  |   |                     |  |  |  |
| (Street)   |     |  |   |                              |   |  |      |  |                                  |               |                |  |   | X                         | ′  |   |                     |  |  |  |
| BOSTO  | N M | Ā  | 02210   |                              |   |  |      |  |                                  |               |                | "  | Form filed by More than One Reporting Person                |                           |  |   |                     |  |  |  |
| (City)   | (S  | tate)                                      | (Zip)   |                              |   |  |      |  |                                  |               |                |  |   |                           |  |   |                     |  |  |  |
|  |     | Ta   | able I - Non-I  | Derivat                      | ive S   | ecurities  | s Ac | quire  | ed, Di                           | spo           | sed o          | of, or B   | enef  | icially                   | Owned  |   |                     |  |  |  |
| Date   |     |  |   | Transact<br>ate<br>Month/Day |   | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year)  |      | C <sub>0</sub>   | Transaction Dispose Code (Instr. |               |                | rities Acquired (A)<br>ed Of (D) (Instr. 3, 4                                |   |                           |  |   | Form:               | Direct Indirect Etr. 4)  | 7. Nature of Indirect Beneficial Ownership                         |  |
|  |     |  |   |                              |   |  |      | Code V   |                                  | Aı            | Amount (A) (C) |  | or  | Price                     | Transaction(s)<br>(Instr. 3 and 4)                                   |   |                     |  | nstr. 4)   |  |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |     |  |   |                              |   |  |      |  |                                  |               |                |  |   |                           |  |   |                     |  |  |  |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)  |     | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | Code (Instr.                 |   | 5. Number of<br>Derivative<br>Securities<br>Acquired (A)<br>or Disposed<br>of (D) (Instr. 3,<br>4 and 5) |      | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |                                  |               | e and          | 7. Title and Amo<br>Securities Under<br>Derivative Secur<br>(Instr. 3 and 4) |   | erlying                   | 8. Price of<br>Derivative<br>Security<br>(Instr. 5)                  | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s |                     | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |
|  |     |  |   | Code                         | v   | (A)  | (D)  | Date<br>Exerci   | isable                           | Expir<br>Date | ration         | Title  |   | ount or<br>nber of<br>res |  | (Instr. 4)  |                     |  |  |  |
| Phantom<br>stock   | (1) | 12/31/2007                                 |   | A                            |   | 442.4115   |      | (2   | 2)                               | (             | (3)            | Commor<br>stock  | 442   | 2.4115                    | \$33.34  | 3,788.34  | 136 <sup>(4)</sup>  | D  |  |  |

## **Explanation of Responses:**

- 1. 1 for 1
- 2. Immediately exercisable
- 3. The shares of phantom stock become payable upon the reporting person's termination of service as a director.
- 4. On November 9, 2007, Cabot's Board of Directors declared a dividend of \$.18 per share on Cabot common stock, payable on December 14, 2007 to all holders of record of common stock on November 30, 2007. Mr. Enriquez-Cabot received a dividend on his phantom stock units totalling \$599.06, which was immediately reinvested in phantom stock units at a price of \$33.60 per share. As a result, 17.8292 phantom stock units were allocated to Mr. Enriquez-Cabot on December 14, 2007.

## Remarks:

Michaela Allbee, pursuant to a power of attorney from Juan

01/03/2008

Enriquez-Cabot

\*\* Signature of Reporting Person

Date

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

- \* 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.

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 Number.