FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| Check this box if no longer subject to Section 16. Form 4 or Form 5 | STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP                           |
|---|--|
| obligations may continue. See Instruction 1(b).                     | Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 |

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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

| 1. Name and Address of Reporting Person* ADDISON BRIAN M                            |   |  |   |        |  | 2. Issuer Name and Ticker or Trading Symbol DENTSPLY INTERNATIONAL INC /DE/ [ XRAY ] |       |                         |  |      |  |   |                                |   | ck all appli<br>Directo   | cable)  | g Per | rson(s) to Iss<br>10% Ov<br>Other (s                                     | wner                                    |  |
|---|---|--|---|--------|--|--|-------|-------------------------|--|------|--|---|--------------------------------|---|---|---|-------|--|---|--|
| (Last)<br>221 W. F  | (First) (Middle) PHILADELPHIA ST                                      |  |   |        |  | 3. Date of Earliest Transaction (Month/Day/Year) 10/06/2009                          |       |                         |  |      |  |   |                                |   | below)  |   | IT &  | below)   | ·                                       |  |
| (Street) YORK (City)  | P/  | tate)                                      | 17405-0872<br>(Zip)                           |        |  | 4. If Amendment, Date of Original Filed (Month/Day/Year)                             |       |                         |  |      |  |   |                                |   | 6. Individual or Joint/Group Filing (Check Applicable ine)  X Form filed by One Reporting Person  Form filed by More than One Reporting  Person |   |       |  |   |  |
| Table I - Non-Deriva  1. Title of Security (Instr. 3)  2. Transac Date (Month/Date) |   |  |   | action | ction 2A. Deemed Execution Date,       |  |       | 3.<br>Transa<br>Code (I | 3. Transaction Code (Instr. 8) 4. Secur Dispose 5) |      | ities Acquired (A) or<br>d Of (D) (Instr. 3, 4 a |   | or<br>I and                    | 5. Amount of Securities Beneficially Owned Following Reported |   | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4)                               |       | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4)        |   |  |
|   |   | Т  | able II -                                     |        |  |  |       |                         | uired, D<br>s, option                              |      |  | , or Ben  | efici                          |   | 1,  | ,   |       |  |   |  |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)                                 | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deeme<br>Execution<br>if any<br>(Month/Da | Date,  | 4.<br>Transaction<br>Code (Instr<br>8) |  |       |                         | 6. Date Exc<br>Expiration<br>(Month/Da             | Date |  | Amount of<br>Securities<br>Underlying<br>Derivative Sec<br>(Instr. 3 and 4) |                                | rity  | B. Price of<br>Derivative<br>Security<br>Instr. 5)  | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | ly    | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | Beneficial<br>Ownership<br>t (Instr. 4) |  |
|   |   |  |   |        | Code                                   | v  | (A)   | (D)                     | Date<br>Exercisabl                                 |      | xpiration<br>ate                                 | Title   | Amo<br>or<br>Num<br>of<br>Shar | ber   |   |   |       |  |   |  |
| Additional<br>RSUs <sup>(1)</sup>   | \$33.6  | 10/06/2009                                 |   |        | Α                                      |  | 20.28 |                         | (2)  |      | (2)  | Common<br>Stock   | 20.                            | 28  | \$33.6  | 13,650.   | 6     | D  |   |  |

## Explanation of Responses:

- 1. Dividend on existing vested or unvested Restricted Stock Units (RSUs) awarded to participant, payable as additional units of phantom stock
- 2. Not applicable to this transaction

## Remarks:

10/06/2009 Brian M. Addison, POA

\*\* Signature of Reporting Person

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.