

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

**FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

DENTSPLY INTERNATIONAL INC.

(Exact name of registrant as specified in its charter)

Delaware

39-1434669

(State or other jurisdiction of incorporation or
organization)

(I.R.S. Employer Identification No.)

**221 West Philadelphia Street
York, Pennsylvania**
(Address of Principal Executive Offices)

17405-0872
(Zip Code)

DENTSPLY International Inc. 2010 Equity Incentive Plan

(Full title of the plan)

Brian M. Addison, Esq.
Vice President, Secretary and General Counsel
221 West Philadelphia Street
York, Pennsylvania 17405-0872
(Name and address of agent for service)

(717) 845-7511
(Telephone number, including area code, of agent for service)

Copy to:
Alan Singer
Morgan, Lewis & Bockius LLP
1701 Market Street
Philadelphia, PA 19103-2921
(215) 963-5000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of Registration fee
Common Stock, \$.01 par value	13,667,219 shares (1)	\$ 30.62 (2)	\$ 418,490,245.78 (2)	\$ 29,838.35

(1) Pursuant to Rule 416(a) under the Securities Act of 1933, this Registration Statement shall be deemed to cover additional shares of the Common Stock that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends, recapitalizations or other similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee, pursuant to Rules 457(c) and 457(h) under the Securities Act of 1933, based on the average of the high and low prices of the Common Stock reported on the NASDAQ Global Market on June 8, 2010.

PART II - INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

DENTSPLY International, Inc. (the "Registrant") hereby incorporates by reference into this Registration Statement the following documents previously filed with the Securities and Exchange Commission (the "Commission"):

1. The Registrant's Annual Report, on Form 10-K for the fiscal year ended December 31, 2009.
2. The Registrant's Quarterly Report, on Form 10-Q for the quarter ended March 31, 2010.
3. The Registrant's Current Report on Form 8-K, filed with the Commission on April 13, 2010.
4. The description of the Common Stock contained in the Registrant's Registration Statement on Form 10, filed with the Commission on September 10, 1987, including any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the Registrant with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), after the date of this Registration Statement and before the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered by this Registration Statement have been sold or that deregisters all securities remaining unsold, will be deemed to be incorporated by reference into this Registration Statement and to be a part of this Registration Statement from the date of filing of such document. Unless expressly incorporated by reference in this Registration Statement, any information contained in any current report on Form 8-K, or any exhibit to the report, that is furnished to, rather than filed with, the Commission will not be incorporated by reference in this Registration Statement. Any statement contained in any document incorporated or deemed to be incorporated by reference or deemed to be a part of this Registration Statement will be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained in this Registration Statement or in any other subsequently filed document that also is or is deemed to be incorporated by reference or deemed to be a part of this Registration Statement modifies or replaces such statement. Any statement contained in a document that is deemed to be incorporated by reference or deemed to be a part of this Registration Statement after the most recent effective date may modify or replace existing statements contained in this Registration Statement. In either case, any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part hereof.

Experts

The financial statements, financial statement schedule and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Annual Report on Internal Control over Financial Reporting) incorporated in this Registration Statement by reference to the Annual Report on Form 10-K for the year ended December 31, 2009 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

In the event that PricewaterhouseCoopers LLP consents to the incorporation by reference in this Registration Statement of its report relating to audited financial statements, financial statement schedule and effectiveness of internal control over financial reporting included in a document subsequently filed by the Registrant, such audited financial statements shall be incorporated herein in reliance upon such report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Item 4. Description of Securities.

Not Applicable.

Item 5. Interests of Named Experts and Counsel.

Not Applicable.

Item 6. Indemnification of Directors and Officers.

The Registrant is organized under the laws of the State of Delaware. Section 145 of the General Corporation Law of the State of Delaware, as amended (the "GCL"), provides that a Delaware corporation has the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation in such capacity in another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. In addition, a Delaware corporation has the power to indemnify any person who was or is a party or is threatened to be made a party to any such threatened, pending or completed action, suit or proceeding by or in the right of the corporation by reason of the fact that the person is or was serving as a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation in such capacity for another enterprise, against expenses actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation; however, in the case of such action, suit or proceeding by or in the right of the corporation, no indemnification is permitted in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the Delaware Court of Chancery, or the court in which such action or suit was brought, shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Delaware Court of Chancery or such other court shall deem proper. Article V of the Registrant's Amended and restated By-Laws (the "By-Laws") generally provides that the Registrant will indemnify any person who has satisfied the standards for indemnification set forth in the GCL.

Under Section 145 of the GCL, a Delaware corporation has the power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or other agent of the corporation or, if serving in such capacity at the request of the corporation, of another enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation has the power to indemnify such person against such liability under the GCL. Article V of the Registrant's By-Laws authorizes the purchase of such insurance, and the Registrant has purchased directors and officers liability insurance .

Section 102(b)(7) of the GCL provides that a Delaware corporation may, with certain limitations, set forth in its certificate of incorporation a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of a fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) under Section 174 of the GCL (relating to unlawful payments of dividends or stock repurchases) or (4) for any transaction from which the director derived an improper personal benefit. Article 9 of the Registrant's Restated Certificate of Incorporation contains a provision eliminating liability of its directors to the extent permitted by Section 102(b).

Item 7. Exemption from Registration Claimed.

Not Applicable.

Item 8. Exhibits.

<u>Exhibit Number</u>	<u>Item</u>
Exhibit 3.1	Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-8 filed on November 27, 2002).
Exhibit 3.2	Amended By-laws of the Company (incorporated by reference to Exhibit 3.2 to Registrant's Form 10-Q for the quarter March 31, 2010).
Exhibit 4.1	DENTSPLY International Inc. 2010 Equity Incentive Plan (incorporated by reference to Appendix A to the Company's Proxy Statement filed on April 9, 2010).
Exhibit 5.1	Opinion of Morgan, Lewis & Bockius LLP (filed herewith)
Exhibit 23.1	Consent of PricewaterhouseCoopers LLP (filed herewith)
Exhibit 23.2	Consent of Morgan, Lewis & Bockius LLP (included in Exhibit 5.1)
Exhibit 24.1	Power of Attorney (included on signature page of this Registration Statement)

Item 9. Undertakings

A. The undersigned Registrant hereby undertakes:

(i) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(a) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(b) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(c) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (i) and (ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

(ii) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(iii) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

B. The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

C. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES AND POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act, DENTSPLY International Inc., certifies that it has reasonable grounds to believe that it meets all the requirements for filing this Registration Statement on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in York, Pennsylvania on June 9, 2010.

DENTSPLY International, Inc.

By: /s/ Brian M. Addison
Brian M. Addison
Vice President, Secretary and General Counsel

KNOWN ALL PERSONS BY THESE PRESENTS, that each person in so signing also constitutes and appoints Brian M. Addison and William R. Jellison or any of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign the Registration Statement on Form S-8 under the Securities Act, to sign any and all pre- or post-effective amendments to the Registration Statement on Form S-8, and to file the same with all exhibits thereto, and other documents in connection therewith, with the Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed below on June 9, 2010 by the following persons in the respective capacities indicated below.

<u>Signature</u>	<u>Title</u>
<u>/s/ Bret W. Wise</u> Bret W. Wise	Chief Executive Officer and Director (principal executive officer)
<u>/s/ William R. Jellison</u> William R. Jellison	Senior Vice President and Chief Financial Officer (principal financial and accounting officer)
<u>/s/ Dr. Michael C. Alfano</u> Dr. Michael C. Alfano	Director
<u>/s/ Eric K. Brandt</u> Eric K. Brandt	Director
<u>/s/ Paula H. Cholmondeley</u> Paula H. Cholmondeley	Director
<u>/s/ Michael J. Coleman</u> Michael J. Coleman	Director

<u>/s/ Dr. Wendy L. Dixon</u> Dr. Wendy L. Dixon	Director
<u>/s/ William F. Hecht</u> William F. Hecht	Director
<u>/s/ Leslie A. Jones</u> Leslie A. Jones	Director
<u>/s/ Francis J. Lunger</u> Francis J. Lunger	Director
<u>/s/ John C. Miles II</u> John C. Miles II	Director
<u>/s/ John L. Miclot</u> John L. Miclot	Director

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Exhibit 3.2	Amended By-laws of the Company (incorporated by reference to Exhibit 3.2 to Registrant's Form 10-Q for the quarter March 31, 2010).
Exhibit 4.1	DENTSPLY International Inc. 2010 Equity Incentive Plan (incorporated by reference to Appendix A, to the Company's Proxy Statement on Schedule 14A filed on April 9, 2010).
Exhibit 5.1	Legal Opinion of Morgan, Lewis & Bockius LLP (filed herewith)
Exhibit 23.1	Consent of PricewaterhouseCoopers LLP (filed herewith)
Exhibit 23.2	Consent of Morgan, Lewis & Bockius LLP (included in Exhibit 5.1)
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June 4, 2010

DENTSPLY International Inc.
221 West Philadelphia Street
York, Pennsylvania 17405-0872

Re: DENTSPLY International Inc. – Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to DENTSPLY International Inc., a Delaware corporation (the “Company”), in connection with the preparation of a registration statement on Form S-8 (the “Registration Statement”) to be filed with the Securities and Exchange Commission (the “Commission”) under the Securities Act of 1933, as amended (the “Act”). The Registration Statement relates to the registration of up to 13,667,219 shares of the Company’s common stock, \$.01 par value (the “Common Stock”), issuable under DENTSPLY International Inc. 2010 Equity Incentive Plan (the “Plan”). We have examined such certificates, records, statutes and other documents as we have deemed relevant in rendering this opinion.

As to matters of fact, we have relied on representations of officers of the Company. We have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of the documents submitted to us as originals, the conformity with the originals of all documents submitted to us as certified, facsimile or photostatic copies and the authenticity of the originals of all document submitted to us as copies.

Based upon the foregoing, it is our opinion that the shares of Common Stock originally issued by the Company to participants under the Plan, when issued and paid for in accordance with the terms of the Plan, will be duly authorized, validly issued, fully paid and non-assessable.

The opinions expressed herein are limited to the Delaware General Corporation Law.

We hereby consent to the use of this opinion as Exhibit 5 to the Registration Statement. In giving such consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Act or the rules or regulations of the Securities and Exchange Commission thereunder.

Very truly yours,

/s/ Morgan, Lewis & Bockius LLP

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 22, 2010 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in DENTSPLY International Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

Philadelphia, PA

June 4, 2010
