

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

12/31/97

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934
(AMENDMENT NO. 1)*

DENTSPLY INTERNATIONAL INC.
(NAME OF ISSUER)
COMMON STOCK
(TITLE CLASS OF SECURITIES)
249030107
(CUSIP NUMBER)

CHECK THE FOLLOWING BOX IF A FEE IS BEING PAID WITH THIS STATEMENT. _____ (A FEE IS NOT REQUIRED ONLY IF THE FILING PERSON: (1) HAS A PREVIOUS STATEMENT ON FILE REPORTING BENEFICIAL OWNERSHIP OF MORE THAN FIVE PERCENT OF THE CLASS OF SECURITIES DESCRIBED IN ITEM 1; AND (2) HAS FILED NO AMENDMENT SUBSEQUENT THERETO REPORTING BENEFICIAL OWNERSHIP OF FIVE PERCENT OR LESS OF SUCH CLASS.) (SEE RULE 13D-7).

*THE REMAINDER OF THIS COVER PAGE SHALL BE FILLED OUT FOR A REPORTING PERSON'S INITIAL FILING ON THIS FORM WITH RESPECT TO THE SUBJECT CLASS OF SECURITIES, AND FOR ANY SUBSEQUENT AMENDMENT CONTAINING INFORMATION WHICH WOULD ALTER THE DISCLOSURES PROVIDED IN A PRIOR COVER PAGE.

THE INFORMATION REQUIRED IN THE REMAINDER OF THIS COVER PAGE SHALL NOT BE DEEMED TO BE "FILED" FOR THE PURPOSE OF SECTION 18 OF THE SECURITIES EXCHANGE ACT OF 1934 ("ACT") OR OTHERWISE SUBJECT TO THE LIABILITIES OF THAT SECTION OF THE ACT BUT SHALL BE SUBJECT TO ALL OTHER PROVISIONS OF THE ACT (HOWEVER, SEE THE NOTES).

CUSIP NO. 249030107 13G PAGE 2 OF 5 PAGES

1. NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF PERSON
STATE STREET BANK AND TRUST COMPANY, TRUSTEE 04-1867445
DENTSPLY INTERNATIONAL INC. EMPLOYEE STOCK OWNERSHIP PLAN

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP.*

NOT APPLICABLE

A ___
B ___

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

BOSTON, MASSACHUSETTS

5. SOLE VOTING POWER

0 SHARES

6. SHARED VOTING POWER

8,409,060 SHARES

7. SOLE DISPOSITIVE POWER

0 SHARES

8. SHARED DISPOSITIVE POWER

8,409,060 SHARES

9. AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

8,409,060 SHARES

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

NOT APPLICABLE

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

15.5%

12. TYPE OF REPORTING PERSON*

BK

CUSIP NO. 249030107

13G

PAGE 2A OF 5 PAGES

1. NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF PERSON

STATE STREET BANK AND TRUST COMPANY, TRUSTEE 04-1867445

OR DISCRETIONARY ADVISOR VARIOUS COLLECTIVE INVESTMENT FUNDS FOR

EMPLOYEE BENEFIT PLANS AND OTHER INDEX ACCOUNTS DENTSPLY

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP.*

NOT APPLICABLE

A ___

B ___

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

BOSTON, MASSACHUSETTS

5. SOLE VOTING POWER

228,684 SHARES

6. SHARED VOTING POWER

0 SHARES

7. SOLE DISPOSITIVE POWER

233,284 SHARES

8. SHARED DISPOSITIVE POWER

0 SHARES

9. AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

233,284 SHARES

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

NOT APPLICABLE

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

.4%

12. TYPE OF REPORTING PERSON*

BK

CUSIP NO. 249030107 13G PAGE 2B OF 5 PAGES

1. NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF PERSON
STATE STREET BANK AND TRUST COMPANY, TRUSTEE/CO-TRUSTEE 04-1867445
VARIOUS TRUST ACCOUNTS DENTSPLY

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP.*

NOT APPLICABLE A ___
B ___

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

BOSTON, MASSACHUSETTS

5. SOLE VOTING POWER

2,800 SHARES

6. SHARED VOTING POWER

0 SHARES

7. SOLE DISPOSITIVE POWER

1,800 SHARES

8. SHARED DISPOSITIVE POWER

1,000 SHARES

9. AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,800 SHARES

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

NOT APPLICABLE

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

.0%

12. TYPE OF REPORTING PERSON*

BK

SCHEDULE 13G PAGE 3 OF 5 PAGES

ITEM 1.

(A) NAME OF ISSUER

DENTSPLY INTERNATIONAL INC.

(B) ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

570 WEST COLLEGE AVENUE
P.O. BOX 872
YORK, PA 17405-0872

ITEM 2.

(A) NAME OF PERSON FILING

STATE STREET BANK AND TRUST COMPANY, TRUSTEE

(B) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE,

RESIDENCE

225 FRANKLIN STREET, BOSTON, MA 02110

(C) CITIZENSHIP

BOSTON, MASSACHUSETTS

(D) TITLE CLASS OF SECURITIES

COMMON STOCK

(E) CUSIP NUMBER

249030107

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13D-1(B), OR 13D-2(B), CHECK WHETHER THE PERSON FILING IS A:

(B) X BANK AS DEFINED IN SECTION 3(A)(6) OF THE ACT

PAGE 4 of 5 PAGES

ITEM 4. OWNERSHIP

(A) AMOUNT BENEFICIALLY OWNED

8,645,144 SHARES

(B) PERCENT OF CLASS

15.9%

(C) NUMBER OF SHARES AS TO WHICH SUCH PERSON HAS:

(I) SOLE POWER TO VOTE OR TO DIRECT THE VOTE
231,484 SHARES

(II) SHARED POWER TO VOTE OR TO DIRECT THE VOTE
8,409,060 SHARES

(III) SOLE POWER TO DISPOSE OR TO DIRECT THE DISPOSITION OF
235,084 SHARES

(IV) SHA800 POWER TO DISPOSE OR TO DIRECT THE DISPOSITION OF
8,410,060 SHARES

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

NOT APPLICABLE

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

NOT APPLICABLE

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY

NOT APPLICABLE

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

NOT APPLICABLE

ITEM 9. NOTICE OF DISSOLUTION OF GROUP

NOT APPLICABLE

PAGE 5 OF 5 PAGES

ITEM 10. CERTIFICATION

THE FOLLOWING CERTIFICATION SHALL BE INCLUDED IF THE STATEMENT IS FILED PURSUANT TO RULE 13D-1(B):

BY SIGNING BELOW I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE SECURITIES REFERRED TO ABOVE WERE ACQUIRED IN THE ORDINARY COURSE OF BUSINESS AND WERE NOT ACQUIRED FOR THE PURPOSE OF AND DO NOT HAVE THE EFFECT OF CHANGING OR INFLUENCING THE CONTROL OF THE ISSUER OF SUCH SECURITIES AND WERE NOT ACQUIRED IN CONNECTION WITH OR AS A PARTICIPANT IN ANY TRANSACTION HAVING SUCH PURPOSES OR EFFECT.

THIS REPORT IS NOT AN ADMISSION THAT STATE STREET BANK AND TRUST COMPANY IS THE BENEFICIAL OWNER OF ANY SECURITIES COVERED BY THIS REPORT, AND STATE STREET BANK AND TRUST COMPANY EXPRESSLY DISCLAIMS BENEFICIAL OWNERSHIP OF ALL SHARES REPORTED HEREIN PURSUANT TO RULE 13D-4.

SIGNATURE

AFTER REASONABLE INQUIRY AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, I CERTIFY THAT THE INFORMATION SET FORTH IN THIS STATEMENT IS TRUE, COMPLETE AND CORRECT.

10 FEBRUARY 1998

STATE STREET BOSTON CORPORATION
STATE STREET BANK AND TRUST COMPANY,
TRUSTEE

/s/ Mary Sue Spain
Senior Compliance Officer