

SCHEDULE 13G

Amendment No. 6
Minerals Technologies Incorporated
Common Stock
Cusip #603158106

Cusip #603158106
Item 1: Reporting Person - FMR Corp.
Item 4: Delaware
Item 5: 35,266
Item 6: 0
Item 7: 635,766
Item 8: 0
Item 9: 635,766
Item 11: 3.155%
Item 12: HC

Cusip #603158106
Item 1: Reporting Person - Edward C. Johnson 3d
Item 4: United States of America
Item 5: 0
Item 6: 0
Item 7: 635,766
Item 8: 0
Item 9: 635,766
Item 11: 3.155%
Item 12: IN

Cusip #603158106
Item 1: Reporting Person - Abigail P. Johnson
Item 4: United States of America
Item 5: 0
Item 6: 0
Item 7: 635,766
Item 8: 0
Item 9: 635,766
Item 11: 3.155%
Item 12: IN

SCHEDULE 13G - TO BE INCLUDED IN
STATEMENTS
FILED PURSUANT TO RULE 13d-1(b) or 13d-2(b)

Item 1(a). Name of Issuer:
Minerals Technologies Incorporated

Item 1(b). Name of Issuer's Principal Executive Offices:
405 Lexington Avenue, 19th Floor
New York, NY 10174

Item 2(a). Name of Person Filing:
FMR Corp.

Item 2(b). Address or Principal Business Office or, if None,
Residence:
82 Devonshire Street, Boston,
Massachusetts 02109

Item 2(c). Citizenship:
Not applicable

Item 2(d). Title of Class of Securities:
Common Stock

Item 2(e). CUSIP Number:

Item 3. This statement is filed pursuant to Rule 13d-1(b) or 13d-2(b) and the person filing, FMR Corp., is a parent holding company in accordance with Section 240.13d-1(b)(ii)(G). (Note: See Item 7).

Item 4. Ownership

(a) Amount Beneficially Owned: 635,766

(b) Percent of Class: 3.155%

(c) Number of shares as to which such person has:

(i) sole power to vote or to direct the vote: 35,266

(ii) shared power to vote or to direct the vote: 0

(iii) sole power to dispose or to direct the disposition of: 635,766

(iv) shared power to dispose or to direct the disposition of: 0

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof, the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following (X).

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.

See attached Exhibit(s) A, B.

Item 8. Identification and Classification of Members of the Group.

Not Applicable. See attached Exhibit A.

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certification.

Inasmuch as the reporting persons are no longer the beneficial owners of more than five percent of the number of shares outstanding, the reporting persons have no further reporting obligation under Section 13(d) of the Securities and Exchange Commission thereunder, and the reporting persons have no obligation to amend this Statement if any material change occurs in the facts set forth herein.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this Schedule 13G in connection with FMR Corp.'s beneficial ownership of the Common Stock of Minerals Technologies Incorporated at December 31, 2002 is true, complete and correct.

January 10, 2003
Date

/s/Lena G. Goldberg
Signature

Lena G. Goldberg
Duly authorized under Power of Attorney
dated January 3, 2003 by and on behalf
of FMR Corp. and its direct and indirect
subsidiaries

SCHEDULE 13G - TO BE INCLUDED IN
STATEMENTS

FILED PURSUANT TO RULE 13d-1(b) or 13d-2(b)

Pursuant to the instructions in Item 7 of Schedule 13G, Fidelity Management & Research Company ("Fidelity"), 82 Devonshire Street, Boston, Massachusetts 02109, a wholly-owned subsidiary of FMR Corp. and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, is the beneficial owner of 600,500 shares or 2.980% of the Common Stock outstanding of Minerals Technologies Incorporated ("the Company") as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940.

Edward C. Johnson 3d, FMR Corp., through its control of Fidelity, and the funds each has sole power to dispose of the 600,500 shares owned by the Funds.

Neither FMR Corp. nor Edward C. Johnson 3d, Chairman of FMR Corp., has the sole power to vote or direct the voting of the shares owned directly by the Fidelity Funds, which power resides with the Funds' Boards of Trustees. Fidelity carries out the voting of the shares under written guidelines established by the Funds' Boards of Trustees.

Fidelity Management Trust Company, 82 Devonshire Street, Boston, Massachusetts 02109, a wholly-owned subsidiary of FMR Corp. and a bank as defined in Section 3(a)(6) of the Securities Exchange Act of 1934, is the beneficial owner of 35,200 shares or 0.175% of the Common Stock outstanding of the Company as a result of its serving as investment manager of the institutional account(s).

Edward C. Johnson 3d and FMR Corp., through its control of Fidelity Management Trust Company, each has sole dispositive power over 35,200 shares and sole power to vote or to direct the voting of 35,200 shares of Common Stock owned by the institutional account(s) as reported above.

Geode Capital Management, LLC, 53 State Street, Boston, Massachusetts 02109, a Delaware limited liability company ("Geode LLC"), is the beneficial owner of 66 shares or 0.000% of the outstanding common stock of the Company. Geode LLC is wholly-owned by Fidelity Investors III Limited Partnership ("FILP III"), a Delaware limited partnership. Geode LLC is an investment adviser registered under Section 203 of the Investment Advisers Act of 1940. Fidelity Investors Management, LLC ("FIML"), a Delaware limited liability company, is the general partner and investment manager of FILP III, and is an investment manager registered under Section 203 of the Investment Advisers Act of 1940. The managers of Geode LLC, the members of FIML and the limited partners of FILP III are certain shareholders and employees of FMR Corp.

Members of the Edward C. Johnson 3d family are the predominant owners of Class B shares of common stock of FMR Corp., representing approximately 49% of the voting power of FMR Corp. Mr. Johnson 3d owns 12.0% and Abigail Johnson owns 24.5% of the aggregate outstanding voting stock of FMR Corp. Mr. Johnson 3d is Chairman of FMR Corp. and Abigail P. Johnson is a Director of FMR Corp. The Johnson family group and all other Class B shareholders have entered into a shareholders' voting agreement under which all Class B shares will be voted in accordance with the majority vote of Class B shares. Accordingly, through their ownership of voting common stock and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed,

under the Investment Company Act of 1940, to form a controlling group with respect to FMR Corp.

SCHEDULE 13G - TO BE INCLUDED IN
STATEMENTS

FILED PURSUANT TO RULE 13d-1(b) or 13d-2(b)
RULE 13d-1(f)(1) AGREEMENT

The undersigned persons, on January 10, 2003, agree and consent to the joint filing on their behalf of this Schedule 13G in connection with their beneficial ownership of the Common Stock of Minerals Technologies Incorporated at December 31, 2002.

FMR Corp.

By /s/ Lena G. Goldberg
Lena G. Goldberg
Duly authorized under Power of Attorney dated January 3, 2003, by and on behalf of FMR Corp. and its direct and indirect subsidiaries

Edward C. Johnson 3d

By /s/ Lena G. Goldberg
Lena G. Goldberg
Duly authorized under Power of Attorney dated January 3, 2003, by and on behalf of Edward C. Johnson 3d

Abigail P. Johnson

By /s/ Lena G. Goldberg
Lena G. Goldberg
Duly authorized under Power of Attorney dated January 3, 2003, by and on behalf of Abigail P. Johnson

Fidelity Management & Research Company

By /s/ Lena G. Goldberg
Lena G. Goldberg
Senior V.P. and General Counsel. FMR Corp.