

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Schedule 13G

Under the Securities Exchange Act of 1934  
(Amendment No. 5)

FMC TECHNOLOGIES, INC.

\_\_\_\_\_  
(Name of Issuer)

Common Stock

\_\_\_\_\_  
(Title of Class of Securities)

30249U101

\_\_\_\_\_  
(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).

(Continued on following page(s))

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CUSIP NO. 30249U101

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1 Name of Reporting Person  
S.S. or I.R.S. Identification No. of Above Person

T. ROWE PRICE ASSOCIATES, INC.  
52-0556948

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

MARYLAND

Number of 5 Sole Voting Power  
\*\*

Shares 1,769,081

Beneficially 6 Shared Voting Power  
Owned By Each \*\* -0-  
Reporting 7 Sole Dispositive Power  
Person \*\* 7,669,236  
With 8 Shared Dispositive Power  
-0-

9 Aggregate Amount Beneficially Owned by Each Reporting Person

7,669,236

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

11.2%

12 Type of Reporting Person\*

IA

\*SEE INSTRUCTION BEFORE FILLING OUT!

\*\*Any shares reported in Items 5 and 6 are also reported in Item 7.

SCHEDULE 13G  
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Item 1(a) Name of Issuer:

Reference is made to page 1 of this Schedule 13G

Item 1(b) Address of Issuer's Principal Executive Offices:

1803 Gears Road, Houston, TX 77067

Item 2(a) Name of Person(s) Filing:

(1) T. Rowe Price Associates, Inc. ("Price Associates")

(2) \_\_\_\_\_

\_\_\_\_\_  
Attached as Exhibit A is a copy of an agreement between the Persons Filing (as specified hereinabove) that this Schedule 13G is being filed on behalf of each of them.

Item 2(b) Address of Principal Business Office:

100 E. Pratt Street, Baltimore, Maryland 21202

Item 2(c) Citizenship or Place of Organization:

(1) Maryland

(2) \_\_\_\_\_

Item 2(d) Title of Class of Securities:

Reference is made to page 1 of this Schedule 13G

Item 2(e) CUSIP Number: 30249U101

Item 3 The person filing this Schedule 13G is an:

X Investment Adviser registered under Section 203 of the

Investment Advisers Act of 1940

\_\_\_\_\_ Investment Company registered under Section 8 of the  
Investment Company Act of 1940

Item 4 Reference is made to Items 5-11 on page 2 of this  
Schedule 13G.

SCHEDULE 13G

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

X Not Applicable.

\_\_\_\_\_ This statement is being filed to report the fact that, as  
of the date of this report, the reporting person(s) has  
(have+orta 'X9 epor (s) has

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 purpose or effect. T. Rowe Price Associates, Inc. hereby declares and affirms that the filing of this Schedule 13G shall not be construed as an admission that Price Associates is the beneficial owner of the securities referred to, which beneficial ownership is expressly denied.

Signature.

After reasonable inquiry and to the best of my (our) knowledge and belief, I (we) certify that the information set forth in this statement is true, complete and correct.

Dated: February 14, 2007

T. ROWE PRICE ASSOCIATES, INC.

By: /s/ Henry H. Hopkins  
Henry H. Hopkins, Vice President

Note: This Schedule 13G, including all exhibits, must be filed with the Securities and Exchange Commission, and a copy hereof must be sent to the issuer by registered or certified mail not later than February 14th following the calendar year covered by the statement or within the time specified in Rule 13d-1(b)(2), if applicable.

12/31/2006