

United States  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 1)\*

Name of Issuer - Applied Materials Inc.

Title or Class of Securities - Common Stock

CUSIP Number - 038222105

Cusip No. 038222105

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1. Name of Reporting Person  
(S.S. or I.R.S. Identification No. of above person)

Twentieth Century Companies, Inc. - 43-1325032

2. Check the appropriate box if a member of a group\* - N/A

3. SEC Use Only

4. Citizenship or place of organization

Maryland

5. Sole voting power

6,300,000

6. Shared voting power

0

7. Sole dispositive power

6,300,000

8. Shared dispositive power

0

9. Aggregate amount beneficially owned by each reporting person

6,300,000

10. Check box if the aggregate amount in Row (9) excludes  
certain shares - N/A

11. Percent of class represented by amount in Row 9

7.8%

12. Type of reporting person\*

HC

Cusip No. 038222105

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1. Name of Reporting Person  
(S.S. or I.R.S. Identification No. of above person)

Investors Research Corporation - 44-0640487

2. Check the appropriate box if a member of a group\* - N/A

3. SEC Use Only

4. Citizenship or place of organization

Delaware

5. Sole voting power

6,300,000

6. Shared voting power

0

7. Sole dispositive power

6,300,000

8. Shared dispositive power

0

9. Aggregate amount beneficially owned by each reporting person

6,300,000

10. Check box if the aggregate amount in Row (9) excludes certain shares - N/A

11. Percent of class represented by amount in Row 9

7.8%

12. Type of reporting person\*

IA

Cusip No. 038222105

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1. Name of Reporting Person  
(S.S. or I.R.S. Identification No. of above person)

Twentieth Century Investors, Inc. - 44-6006315

2. Check the appropriate box if a member of a group\* - N/A

3. SEC Use Only

4. Citizenship or place of organization

Maryland

5. Sole voting power

6,300,000

6. Shared voting power

0

7. Sole dispositive power

6,300,000

8. Shared dispositive power

0

9. Aggregate amount beneficially owned by each reporting person

6,300,000

10. Check box if the aggregate amount in Row (9) excludes certain shares - N/A

11. Percent of class represented by amount in Row 9

7.8%

12. Type of reporting person\*

IV

Cusip No. 038222105

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1. Name of Reporting Person  
(S.S. or I.R.S. Identification No. of above person)

James E. Stowers, Jr. - 492-38-8397

2. Check the appropriate box if a member of a group\* - N/A

3. SEC Use Only

4. Citizenship or place of organization

United States

5. Sole voting power

6,300,000

6. Shared voting power

0

7. Sole dispositive power

6,300,000

8. Shared dispositive power

0

9. Aggregate amount beneficially owned by each reporting person

6,300,000

10. Check box if the aggregate amount in Row (9) excludes

certain shares - N/A

11. Percent of class represented by amount in Row 9

7.8%

12. Type of reporting person\*

IN

SCHEDULE 13G

Item 1(a). NAME OF ISSUER

Applied Materials Inc.

Item 1(b). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

3050 Bowers Street  
Santa Clara, CA 95054

Item 2(a). NAME OF PERSONS FILING

Twentieth Century Companies, Inc., on its behalf and on  
behalf of:

Investors Research Corporation  
Twentieth Century Investors, Inc.  
James E. Stowers, Jr.

Item 2(b). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE

4500 Main Street, P.O. Box 418210, Kansas City, MO 64141-  
9210 Attn: Patrick A. Looby

Item 2(c). CITIZENSHIP

Maryland

Item 2(d). TITLE OF CLASS OF SECURITIES

Common Stock

Item 2(e). CUSIP NO.

038222105

Item 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13d-  
1(b) OR 13d-2(b), CHECK WHETHER THE PERSON FILING IS A

g [ X ] Parent Holding Company, in accordance with  
Rule 13d-1(b)(ii)(G) (Note: See Item 7).

Item 4. OWNERSHIP

(a) Aggregate amount beneficially owned:

6,300,000

(b) Percent of class:

7.8%

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

- (i) sole power to vote or to direct the vote:  
6,300,000
- (ii) shared power to vote or to direct the vote:  
0
- (iii) sole power to dispose or to direct the  
disposition of: 6,300,000
- (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 [ ] .

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

Investors Research Corporation, a registered investment adviser and a wholly-owned subsidiary of Twentieth Century Companies, Inc., manages, pursuant to management agreements, the investments of four registered investment companies, Twentieth Century Investors, Inc., Twentieth Century World Investors, Inc., Twentieth Century Capital Portfolios, Inc. and TCI Portfolios, Inc. It also manages the assets of institutional investor accounts. The securities that are the subject of this report are owned by and held for such investment companies and separate institutional investor accounts. Any dividends received from such securities, or the proceeds of any sale of such securities, are for the benefit of, and are held for such investment companies and separate institutional investor accounts.

Twentieth Century Investors, Inc. owned 6,300,000 shares or 7.8% of the securities that are the subject of this report.

For further information regarding the ownership of the securities that are the subject of this report, see Exhibit A attached hereto.

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

See attached Exhibits A and B.

Item 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

Not applicable.

Item 9. NOTICE OF DISSOLUTION OF GROUP

Not applicable.

Item 10. CERTIFICATION

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 purpose or effect.

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.

February 10, 1994  
Date

TWENTIETH CENTURY COMPANIES, INC.

By: /s/ William M. Lyons  
William M. Lyons  
Executive Vice President

EXHIBIT A

IDENTITY AND ITEM 3 CLASSIFICATION OF A SUBSIDIARY OF PARENT  
HOLDING COMPANIES

This Schedule 13G is being filed by Twentieth Century Companies, Inc. ("TCC"). Investors Research Corporation ("IRC"), an investment advisor registered under Section 203 of the Investment Advisors Act of 1940, is a wholly-owned subsidiary of TCC. Mr. James E. Stowers, Jr., controls TCC by virtue of his ownership of approximately 60% of the voting stock of TCC.

As a result of its status as investment advisor to four investment companies registered under Section 8 of the Investment Company Act and to several institutional investors, IRC is deemed to be the beneficial owner of and has the sole authority to dispose of and vote 6,300,000 shares (the "Shares") or 7.8% of the outstanding common stock of Applied Materials Inc. (the "Issuer").

TCC, as a result of its control of IRC, and Mr. Stowers, as a result of his control of TCC, are also deemed to beneficially own all such shares deemed to be beneficially owned by IRC. Mr. Stowers, TCC and IRC all disclaim beneficial ownership of the Shares.

The ownership of one investment company client of IRC, Twentieth Century Investors, Inc. ("TCI"), totalled 6,300,000 shares or 7.8% of the outstanding common stock of the Issuer.

This Schedule 13G is being filed by TCC on behalf of TCC, IRC, TCI and Mr. Stowers.

EXHIBIT B

Rule 13d-1(f)(1)(iii) Agreement

Each of the undersigned hereby agrees and consents to the execution and joint filing on its or his behalf by Twentieth Century Companies, Inc. of this Schedule 13G respecting the beneficial ownership of the common stock of Applied Materials Inc. at December 31, 1993.

Dated this 10th day of February, 1994.

Twentieth Century Companies, Inc.

By: /s/ William M. Lyons

William M. Lyons  
Executive Vice President

Investors Research Corporation

By: /s/ William M. Lyons

William M. Lyons  
Executive Vice President

Twentieth Century Investors, Inc.

By: /s/ William M. Lyons

William M. Lyons  
Executive Vice President

/s/ James E. Stowers, Jr.  
James E. Stowers, Jr.