

OMB APPROVAL
EXPIRES: October 31, 1994
ESTIMATED AVERAGE BURDEN
HOURS PER RESPONSE 14.90

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No.)*

Affymetrix, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

00826T108

(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 (the "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).

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CUSIP NO. 00826T108 13G

1. NAME OF REPORTING PERSON
S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Merrill Lynch & Co., Inc.
(on behalf of Merrill Lynch Asset Management Group ("AMG"))**

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

(a) []
(b) []

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

NONE

6. SHARED VOTING POWER

1,232,636

7. SOLE DISPOSITIVE POWER

NONE

8. SHARED DISPOSITIVE POWER

1,232,636

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,232,636 (ownership disclaimed pursuant to Section 13d-4 of the 1934 Act)

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

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

5.37%

12. TYPE OF REPORTING PERSON*

HC, CO

*SEE INSTRUCTION BEFORE FILING OUT!

**SEE EXHIBIT A

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CUSIP NO. 00826T108 13G

1. NAME OF REPORTING PERSON

S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Merrill Lynch Growth Fund

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

(a) []

(b) []

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Massachusetts

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

NONE

6. SHARED VOTING POWER

1,230,600

7. SOLE DISPOSITIVE POWER

NONE

8. SHARED DISPOSITIVE POWER

1,230,600

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,230,600

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

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

5.36%

12. TYPE OF REPORTING PERSON*

IA, PN

*SEE INSTRUCTION BEFORE FILING OUT!

SCHEDULE 13G

ITEM 1 (a) Name of Issuer:

Affymetrix, Inc. (the "Company")

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

3380 Central Expressway
Santa Clara, CA 95051

ITEM 2 (a) Name of Persons Filing:

Merrill Lynch & Co., Inc.
(on behalf of Merrill Lynch Asset Management Group ("AMG"))

Merrill Lynch Growth Fund

ITEM 2 (b) Address of Principal Business Office or, if none, Residence:

Merrill Lynch & Co., Inc.
(on behalf of Merrill Lynch Asset Management Group ("AMG"))
World Financial Center, North Tower
250 Vesey Street
New York, NY 10381

Merrill Lynch Growth Fund
800 Scudders Mill Road
Plainsboro, New Jersey 08536

ITEM 2 (c) Citizenship:

See Item 4 of Cover Pages

ITEM 2 (d) Title of Class of Securities:

Common Stock

ITEM 2 (e) CUSIP NUMBER:

See Cover Page

ITEM 3

If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b), check whether the person filing is a:

- (a) Broker or dealer registered under Section 15 of the Act,
- (b) Bank as defined in Section 3(a)(6) of the Act,
- (c) Insurance Company as defined in Section 3(a)(19) of the Act,
- (d) Investment Company registered under Section 8 of the Investment Company Act,
- (e) Investment Adviser registered under Section 203 of the Investment Advisers Act of 1940,
- (f) Employee Benefit Plan, Pension Fund which is subject to the provisions of the Employee Retirement Income Security Act of 1974 or Endowment Fund; see 13d-1(b)(1)(ii)(F),
- (g) Parent Holding Company, in accordance with Rule 13d-1(b)(ii)(G); see Item 7,
- (h) Group, in accordance with Rule 13d-1(b)(1)(ii)(H).

ITEM 4 Ownership

(a) Amount Beneficially Owned:

See Item 9 of Cover Pages.

(b) Percent of Class:

See Item 11 of Cover Pages

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

(i) sole power to vote or to direct the vote:

See Item 5 of Cover Pages

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

See Item 6 of the Cover Pages

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

See Item 7 of Cover Pages

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

See Item 8 of Cover Pages

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

Not applicable.

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ITEM 6 Ownership of More than Five Percent on Behalf of Another Person.

Merrill Lynch & Co., Inc. ("ML&Co.") is a parent holding company. The Merrill Lynch Asset Management Group ("AMG") is an operating division of ML&Co. consisting of ML&Co.'s indirectly owned asset management subsidiaries. Certain of these subsidiaries hold certain shares of the security which is the subject of this report. (See Item 7).

ITEM 7 Identification and Classification of the Subsidiary Which

Acquired the Security Being Reported on by the Parent Holding Company.

Merrill Lynch & Co., Inc. ("ML&Co.") is a parent holding company. The Merrill Lynch Asset Management Group ("AMG") is an operating division of ML&Co. consisting of ML&Co.'s indirectly-owned asset management subsidiaries. The following asset management subsidiaries hold certain shares of the common stock, which is the subject of this 13G filing:

Merrill Lynch Asset Management, L.P.

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 each of the undersigned certifies that, to the best of their knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held 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 and are not held in connection with or as a participant in any transaction having such purpose or effect.

Signature.
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After reasonable inquiry and to the best of my knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: February 2, 1999

Merrill Lynch & Co, Inc.
(on behalf of Merrill Lynch Asset Management Group ("AMG"))

/s/ Jerry Weiss

Name: Jerry Weiss
Title: Attorney-In-Fact*

Merrill Lynch Growth Fund

/s/ Jerry Weiss

Name: Jerry Weiss
Title: Attorney-In-Fact**

*Signed pursuant to a power of attorney, dated January 25, 1999, included as Exhibit B to Schedule 13G filed with the Securities and Exchange Commission by Merrill Lynch & Co, Inc. (on behalf of Merrill Lynch Asset Management Group ("AMG")) on January 28, 1999 with respect to Creative Technology, Limited.

**Signed pursuant to a power of attorney, dated January 22, 1999, included as an exhibit to Schedule 13G filed with the Securities and Exchange Commission by Merrill Lynch & Co, Inc. (on behalf of Merrill Lynch Asset Management Group ("AMG")) on January 29, 1999 with respect to Transmontaigne Oil Co.

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EXHIBIT A

Merrill Lynch Asset Management Group of ML&Co. ("AMG") is comprised of the following legal entities: Merrill Lynch Asset Management, L.P. doing business as Merrill Lynch Asset Management ("MLAM") including the Merrill Lynch Capital Management Group and Hotchkis and Wiley divisions thereof; Fund Asset Management, L.P., doing business as Fund Asset Management ("FAM"); Merrill Lynch Asset Management U.K. Limited ("MLAM UK"); Merrill Lynch (Suisse) Investment Management Limited ("MLS"); Mercury Asset Management International Limited ("MAMI"); Mercury Asset Management, Ltd.; Mercury Asset Management, Ltd. in Australia; Mercury Asset Management, Ltd. in the Isle of Man; Mercury Asset Management Channel Islands, Ltd.; Mercury Asset Management Pte, Ltd.; Mercury Asset Management Asia Limited; Mercury Asset Management KAG; Munich London Investment Management, Ltd.; Merrill Lynch Asset Management (Hong Kong) Limited; Merrill Lynch Mercury Asset Management Japan Limited; Atlas Asset Management, Inc.; Merrill Lynch Investment Management Canada, Inc.; Merrill Lynch Asset Management (India) Limited; PT Merrill Lynch Indonesia; Merrill Lynch Phatra Securities Co., Ltd.; Merrill Lynch Global Asset Management, Limited; Mercury Asset Management Channel Islands, Limited; Mercury Asset Management International Channel Islands Limited; Grosvenor Venture Managers, Limited; Mercury Fund Managers, Limited; and N.B.K. Investment Management, Limited. Each of MLAM, FAM, MLAM UK, MLS, and MAMI is an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, which acts as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940. Each other firm constituting part of AMG is an investment adviser operating under the laws of a jurisdiction other than the United States. The investment advisers that comprise AMG exercise voting and investment powers over portfolio securities independently from other direct and indirect subsidiaries of ML&Co.

