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

FORM 11-K

(MARK ONE)

[X] ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (FEE REQUIRED)

For the fiscal year ended December 31, 2001

OR

[] TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)

For the transition period from _____to ____

Commission file number 2-69114

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

Applied Materials, Inc. Employee Savings and Retirement Plan

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

APPLIED MATERIALS, INC. 3050 Bowers Avenue Santa Clara, California 95054

SIGNATURE

Pursuant to the requirement of the Securities Exchange Act of 1934, the Administrative Committee has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

APPLIED MATERIALS, INC. EMPLOYEE SAVINGS AND RETIREMENT PLAN By: /s/ Julio A. Aranovich

Julio A. Aranovich Group Vice President, Global Human Resources Applied Global University

APPLIED MATERIALS, INC. EMPLOYEE SAVINGS AND RETIREMENT PLAN

Table of Contents

Independent Accountants' Report

Financial Statements:

Statements of Net Assets Available for Benefits - December 31, 2000 and 2001

Statements of Changes in Net Assets Available for Benefits - years ended December 31, 2000 and 2001

Notes to Financial Statements

Supplemental Schedule:

Schedule of Assets Held for Investment Purposes - as of December 31, 2001

Consent of Independent Accountants (Exhibit 23.1)

INDEPENDENT ACCOUNTANTS' REPORT

To the Participants and Administrative Committee of the Applied Materials, Inc. Employee Savings and Retirement Plan:

We have audited the financial statements of the Applied Materials, Inc. Employee Savings and Retirement Plan (the Plan) as of December 31, 2000 and 2001, and for the years then ended, as listed in the accompanying table of contents. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2000 and 2001, and the changes in net assets available for benefits for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets held for investment purposes as of December 31, 2001 is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects

in relation to the basic financial statements taken as a whole.

<u>/s/ MOHLER, NIXON & WILLIAMS</u> MOHLER, NIXON & WILLIAMS Accountancy Corporation

Campbell, California May 24, 2002

APPLIED MATERIALS, INC. EMPLOYEE SAVINGS AND RETIREMENT PLAN STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

	2000	
ASSETS		
Investments, at fair value Participant loans		\$1,256,354,974 16,740,580
Assets held for investment purposes	1,174,928,703	1,273,095,554
Employer contribution receivable	1,977,767	1,660,043
Total assets	1,176,906,470	1,274,755,597
LIABILITIES		
Forfeitures payable	(635,078)	(1,158,278)
Net assets available for benefits		
	================	===============

See notes to financial statements.

APPLIED MATERIALS, INC. EMPLOYEE SAVINGS AND RETIREMENT PLAN STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

	Years en December 2000	
Additions to net assets attributed to:		
Investment income: Dividends and interest Net realized and unrealized appreciation/(depreciation) in	\$24,093,793	\$9,915,688
fair value of investments	(575,580,419)	24,156,996
	(551,486,626)	34,072,684
Contributions:		
Participant	82,234,009	96,036,427
Employer	25,976,031	30,436,989
	108,210,040	126,473,416
Total additions/(reductions)	(443,276,586)	160,546,100

(82,543,709)	(63,220,173)
(82,543,709)	(63,220,173)
(525,820,295)	97,325,927
1,702,091,687	1,176,271,392
\$1,176,271,392	\$1,273,597,319
	(82,543,709) (525,820,295) 1,702,091,687

See notes to financial statements.

APPLIED MATERIALS, INC. EMPLOYEE SAVINGS AND RETIREMENT PLAN NOTES TO FINANCIAL STATEMENTS

December 31, 2000 and 2001

Note 1 - Significant accounting policies

General

The following description of the Applied Materials, Inc. (Applied) Employee Savings and Retirement Plan (the Plan) provides only general information. Participants seeking detailed information about the Plan should refer to the Plan document and the Summary Plan Description/Prospectus for the Plan.

The Plan is a defined contribution plan that Applied established in 1981 to provide benefits to eligible employees, as provided in the Plan document. The Plan covers all eligible U.S. and expatriate employees of Applied and its participating affiliates. Eligible employees may enroll in the Plan after receipt of their first paycheck. The Plan is intended to comply with the applicable requirements of the Internal Revenue Code (the Code) and the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), as amended.

Administration

Under ERISA, Applied is the designated administrator of the Plan. Applied's Board of Directors has appointed an Administrative Committee (the 401(k) Committee) to manage the day-to-day operation and administration of the Plan. Applied has contracted with Fidelity Institutional Retirement Services Company (Fidelity) to maintain the Plan's individual participant accounts and provide certain other recordkeeping and administrative services, and with Fidelity Management Trust Company (Fidelity Trust) to act as the Plan's custodian and trustee. Applied currently pays administrative expenses on behalf of the Plan, except for loan fees paid by Plan participants who elect to receive a Plan loan. Loan fees are insignificant to these financial statements, and are therefore reported as withdrawals. Brokerage commissions and other charges incurred in connection with investment transactions are paid from Plan assets and are included as a reduction in investment income.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and changes therein, and the disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Basis of accounting

The financial statements of the Plan are prepared using the accrual method of accounting. Participant and Applied matching contributions are recorded in the period during which Applied withholds payroll deductions from participant's earnings. Benefits are recorded when paid.

Investments

Investments of the Plan are held by Fidelity Trust and are invested in the investment options available under the Plan based solely upon instructions received from Plan participants or as provided in the Plan document. The Plan's investments are valued at fair value, as measured by quoted market prices, as of the last day of the Plan year. Purchases and sales of securities are recorded on a

trade-date basis and dividends are recorded on the ex-dividend date. Participant loans are valued at cost, which approximates fair value.

During 2001, the INVESCO Total Return Fund was removed as an investment option under the Plan and the Vanguard Balanced Index Fund was added.

Income taxes

The Plan is intended to qualify for favorable federal and state income tax treatment accorded to plans that qualify under Section 401(a) of the Code, and therefore is intended to be exempt from federal income and state franchise taxes. The Plan has been amended subsequent to receipt of its most recent Internal Revenue Service (IRS) favorable determination letter dated May 22, 1996. The Plan document was amended and restated, generally retroactively effective as of January 1, 1998, to bring it into compliance with applicable law and to make other desired changes. In February 2002, Applied submitted the Plan, as restated, to the IRS for a new favorable determination letter, which is expected to be received in due course.

Risks and uncertainties

The Plan provides participants with investment options consisting of Applied's common stock and various mutual funds offered by the Plan. These mutual funds invest in stocks, bonds, fixed income securities and other investment securities. Applied's common stock and other investment securities are exposed to risks, such as those associated with interest rates, market conditions and credit worthiness of the securities' issuers. These risks could materially affect participants' account balances and the amounts reported in the financial statements.

Note 2 - Acquisitions and transfers

In March 2000, Applied acquired Etec Systems, Inc. (Etec), and the eligible employees of Etec were permitted to contribute to the Plan beginning in April 2000. Eligible employees of Etec also were allowed to rollover their eligible distributions from the Etec Savings and Retirement Plan (Etec Plan) into the Plan. Included in those rollovers were approximately \$615,000 of participant loans. The Etec Plan has been terminated and Applied is in the process of distributing Etec Plan assets to its participants.

Note 3 - Participation and benefits

Participant contributions

Participants may elect to have Applied contribute up to 15 percent of their eligible pre-tax compensation, subject to a dollar limit established by the Code. For participants who elect to contribute a portion of their compensation to the Plan, their taxable compensation is reduced by the amount contributed. Participant salary deferral contributions are invested in various funds in one-percent increments according to the participant's direction.

Participants are also allowed to make rollover contributions of eligible amounts received from other tax-qualified employersponsored retirement plans or conduit IRAs. Such contributions are invested in various funds in accordance with the participant's direction and the Plan's provisions.

Applied matching contributions

Participants in the Plan become eligible to receive Applied matching contributions immediately upon enrolling in the Plan and electing to make salary deferral contributions to the Plan. Matching contributions generally are invested in the Applied Materials, Inc. Common Stock Fund (the Stock Fund), and cannot be transferred to other available investment funds until a participant has completed 10 years of service or is fully vested and age 50 or older. Such participants may transfer their matching contributions into or out of the Stock Fund. Applied currently matches 100 percent of participant contributions up to the first three percent of compensation contributed each payroll period, and then 50 percent of every dollar between four percent and six percent of compensation contributed each payroll period. Applied's matching contributions may be made in the form of cash, shares of Applied's common stock or any combination thereof. Fidelity Trust will use cash contributions to purchase shares of Applied's common stock in the open market (at the then prevailing market price), directly from Applied, or from other persons in private transactions. During 2000 and 2001, Applied's matching contributions were in the form of cash contributions. Applied can change the matching contribution rate, subject to the limits of the Plan and the Code. No changes in the matching contribution rate were made during 2000 or 2001.

Participant accounts

Each participant's account is credited with the participant's contributions, his or her portion of Applied's matching contributions and any investment earnings or losses thereon.

Payment of benefits

Upon termination, a participant or beneficiary generally may elect to leave his or her account balance in the Plan or receive a lumpsum cash distribution of his or her vested account balance. The participant or beneficiary may also elect to receive whole shares of Applied's common stock for any portion of his or her vested account balance that is invested in the Stock Fund. The Plan provides for automatic lump-sum distribution, upon participant termination of employment, of account balances that do not exceed \$5,000.

Loans to participants

The Plan allows active participants to borrow from their salary deferral and rollover account balances up to the lesser of the following: (1) \$50,000, less their highest outstanding loan balance during the past 12 months, (2) 100 percent of their salary deferral and rollover accounts, or (3) 50 percent of their vested account balances (including the vested portion of Applied's matching contributions). Loans are secured by the participants' vested balances, bear interest at prime plus one percent at the time

of the borrowing and must be repaid to the Plan from bi-weekly payroll deductions over the loan term, which will be a minimum of one year and a maximum of five years. Loans are generally payable in full upon a participant's termination of employment from Applied, or the occurrence of certain other events. Specific loan terms and conditions are established by the 401(k) Committee. Outstanding loans at December 31, 2001 carry interest rates ranging from 6.0 percent to 11.5 percent.

Vesting

Participants are immediately vested in their salary deferral and rollover contributions and any related earnings. Prior to January 1, 2002, participants with three years of credited service began to vest 20 percent each year in Applied's matching contributions allocated to their accounts, and became fully vested after seven years of credited service. Participants who are actively employed by Applied become fully vested upon death, total disability, attainment of normal retirement age or termination of the Plan. Participants whose employment was terminated as a result of either an involuntary reduction in force or voluntary separation plan implemented by Applied in 2001 received an additional 20 percent vesting in their matching accounts. As required by the Code, former employees of certain acquired companies have different vesting schedules according to the original vesting schedules under their former employer's plan. If a participant leaves Applied prior to becoming fully vested, the unvested portion of his or her matching account generally will be forfeited. Forfeitures can be used to offset Applied's matching contributions. Forfeitures used to offset Applied's matching contributions in 2000 and 2001 were \$6,707,704 and \$3,277,653, respectively.

Participants who are actively employed by Applied on or after January 1, 2002 and have two years of credited service will begin to vest 20 percent each year in Applied's matching contributions allocated to their accounts, and will become fully vested after six years of credited service.

Note 4 - Party-in-interest and related party transactions

As allowed by the Plan, participants may elect to invest in the Stock Fund. In addition, Applied matching contributions are generally invested in the Stock Fund. Aggregate investment in Applied's common stock at December 31, 2000 and 2001 was as follows:

	Number of shares *	Fair Value
2000	43,964,104	\$841,974,259
2001	45,633,912	\$915,665,686

* Restated to reflect a two-for-one stock split in the form of a 100 percent stock dividend, effective April 16, 2002.

In 2000, the Stock Fund invested primarily in Applied's common stock, and the remainder of the Fund was invested in the Fidelity Institutional Cash Portfolio Money Market Fund (the Money Market Fund) to allow for timely handling of exchanges, withdrawals and distributions. In 2001, the accounting method for the Stock Fund was converted from unitized to share accounting. In a share accounting environment, a cash portion is not required to be maintained. Therefore, in 2001, the Stock Fund did not hold any investment in the Money Market Fund.

Certain Plan investments in mutual funds are managed by the Plan trustee, Fidelity Trust, and qualify as party-in-interest transactions. Such transactions are permitted under the provisions of the Plan and are exempt from the prohibition of party-in-interest transactions under ERISA and applicable exemptions.

Note 5 - Investments

The following table includes the fair values of investments and investment funds that represent five percent or more of the Plan's net assets at December 31:

	2000	2001
Fidelity:		
Retirement Government Money		
Market Portfolio	\$69,834,846	\$95,313,420
Equity Income Fund	37, 313, 177	39,853,989
Intermediate Bond Fund	14,350,427	25,191,200
Magellan Fund	82,058,516	77,188,891
Contrafund	19,451,516	19,218,226
Spartan U.S. Equity Index Fund	19,907,011	20,788,543
Applied Materials, Inc. Common Stock Fund*.	857,069,644	915,665,686
Janus Worldwide Fund	41,977,696	35,794,982
INVESCO Total Return Fund	3,263,024	
Vanguard Mid-Cap Index Fund	4,760,460	9,550,239
Vanguard Balanced Index Fund		4,514,893
Dreyfus Small Cap Stock Index Fund	8,866,807	13,274,905
Participant Loans	16,075,579	16,740,580
Assets held for investment purposes	\$1,174,928,703	\$1,273,095,554

* Includes Applied matching contributions, which are nonparticipant-directed. See Note 6 for further details.

At December 31, 2000, the Stock Fund included investments in the Money Market Fund of \$15,095,385. The balance of the Stock Fund was invested in Applied's common stock. At December 30, 2001, the Stock Fund did not include any investments in the Money Market Fund, as discussed in Note 4.

The Plan's investments, including gains and losses on investments bought, sold and held during the year, appreciated/(depreciated) in value as follows for the years ended December 31:

	2000	2001
Mutual funds Common stock	(\$32,946,224) (542,634,195)	(\$29,991,976) 54,148,972
	(\$575,580,419)	\$24,156,996

Note 6 - Nonparticipant-directed investments

As discussed in Note 3, Applied matching contributions are generally invested in the Stock Fund and cannot be transferred to other investment funds until a participant meets certain criteria. As a result, the portion of the Stock Fund that relates to such employer contributions is a nonparticipant-directed investment. The net assets and significant components of the changes in net assets relating to nonparticipant-directed investments are as follows for the years ended December 31:

	2000	2001
Net Assets: Common Stock=	\$433,576,558	\$464,421,743
Changes in Net Assets: Employer contributions Net realized and unrealized appreciation/(depreciation) in	\$23,547,914	\$30,291,841
fair value of`investments Withdrawals and distributions Transfers from/(to) participant-directed	(266,563,415) (28,749,407)	24,115,057 (16,139,945)
investments	10,893,702	(7,421,768)
- Net increase/(decrease)	(260,871,206)	30,845,185
Net assets - beginning of year	694,447,764	433,576,558
Net assets - end of year	\$433,576,558	\$464,421,743
=		

Note 7 - Plan termination and/or modification

Applied currently intends to continue the Plan indefinitely for the benefit of its participants and their beneficiaries; however, it reserves the right to terminate and/or modify the Plan at any time and for any reason, subject to the provisions of ERISA. In the event the Plan is terminated, participants would become fully vested in their accounts.

APPLIED MATERIALS, INC. EMPLOYEE SAVINGS AND RETIREMENT PLAN SUPPLEMENTAL SCHEDULE

EIN: 94-1655526 **PLAN: 333**

SCHEDULE OF ASSETS HELD FOR INVESTMENT PURPOSES

December 31, 2001

Identity of issue, Description of investment including maturity date, rate of interest, borrower, lessor or

similar party	collateral, par or maturity value	Cost	value
Fidelity Management Trust Company (Fidelity)* Fidelity* Fidelity* Fidelity* Fidelity* Fidelity* Fidelity* Applied Materials, Inc.*	Fidelity Retirement Government Money Market Fund Fidelity Equity Income Fund Fidelity Intermediate Bond Fund Fidelity Magellan Fund Fidelity Contrafund Fidelity Spartan U.S. Equity Index Fund Applied Materials, Inc. Common Stock Fund	\$547,143,067	
Fidelity* Fidelity*	Janus Worldwide Fund Vanguard Mid-Cap Index Fund		35,794,982 9,550,239
Fidelity* Fidelity* Various*	Vangurd Balanced Index Fund Dreyfus Small Cap Stock Index Fund Participant loans with interest		4,514,893 13,274,905
	rates which range from 6.0 percent to 11.5 percent		16,740,580
			\$1,273,095,554

* Party-In-Interest

EXHIBIT INDEX

EXHIBIT NUMBER

- ----

DESCRIPTION

23.1

Consent of Independent Accountants

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 33-52072 and No. 333-31289) of Applied Materials, Inc. of our report dated May 24, 2002, with respect to the financial statements and supplemental schedule of the Applied Materials, Inc. Employee Savings and Retirement Plan included in this Annual Report on Form 11-K.

<u>/s/ MOHLER, NIXON & WILLIAMS</u> MOHLER, NIXON & WILLIAMS Accountancy Corporation

Campbell, California June 26, 2002