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

FORM 11-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2009

OR

o TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number: 000-6920

Applied Materials, Inc. Employee Savings and Retirement Plan

(Full title of the plan)

APPLIED MATERIALS, INC.

3050 Bowers Avenue, P.O. Box 58039
Santa Clara, California 95052-8039
(Name of issuer of the securities held pursuant to the plan and the address of the issuer's and plan's principal executive office)

APPLIED MATERIALS, INC. EMPLOYEE SAVINGS AND RETIREMENT PLAN

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited the accompanying statements of net assets available for benefits of the Applied Materials, Inc. Employee Savings and Retirement Plan (the "Plan") as of December 31, 2009 and 2008, and the related statement of changes in net assets available for benefits for the years then ended. 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 the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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, 2009 and 2008, 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 at end of year) 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, as amended. The supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits 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.

ARMANINO McKENNA LLP San Ramon, California

June 25, 2010

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

	December 31, 2009	December 31, 2008
ASSETS		
Investments, at fair value	\$1,126,803,147	\$880,394,862
Participant loans	13,657,034	13,258,849
Assets held for investment purposes	1,140,460,181	893,653,711
Employer contribution receivable	852,126	1,662,246
Total assets	1,141,312,307	895,315,957
LIABILITIES		
Expenses payable	(261,359)	(295,087)
Total liabilities	(261,359)	(295,087)
Net assets available for benefits, at fair value	1,141,050,948	895,020,870
Adjustment from fair value to contract value for fully benefit-responsive investment contracts	(2,361,741)	7,352,033
Net assets available for benefits	\$1,138,689,207	\$902,372,903

See Accompanying Notes to Financial Statements.

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

		Years ended December 31,	
	2009	2008	
Additions to net assets attributed to:			
Investment income:			
Dividends and interest	\$ 19,393,832	\$ 30,725,920	
Net realized and unrealized appreciation (depreciation) of investments	236,508,073	(475,884,280)	
Total investment income (loss)	255,901,905	(445,158,360)	
Contributions:			
Participant	54,716,711	66,464,600	
Employer	23,442,132	28,056,963	
Total contributions	78,158,843	94,521,563	
Transfers in from outside plans	198,340		
Deductions from net assets attributed to withdrawals and distributions	(97,942,784)	(92,125,920)	
Net increase (decrease) in net assets available for benefits Net assets available for benefits:	236,316,304	(442,762,717)	
Beginning of year	902,372,903	1,345,135,620	
End of year	\$1,138,689,207	\$ 902,372,903	

See Accompanying Notes to Financial Statements.

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

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 more 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 United States 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 qualify as a profit-sharing plan as described in Section 401(a) of the Internal Revenue Code of 1986, as amended (the Code), which includes a qualified cash or deferred arrangement as described in Section 401(k) of the Code. In addition, the Applied Materials, Inc. Common Stock Fund under the Plan (the Stock Fund) is intended to constitute an employee stock ownership plan as described in Section 4975(e)(7) of the Code. The Plan also is intended to comply with the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA).

Plan administration

Under ERISA, Applied is the designated administrator of the Plan. An administrative committee (the 401(k) Committee) manages the day-to-day operations and administration of the Plan on behalf of Applied. The 401(k) Committee members consist of certain Applied employees who do not report directly to Applied's Chief Executive Officer, as specified in the Plan. Applied has contracted with Fidelity Institutional Retirement Services Company (Fidelity) to maintain the Plan's individual participant accounts and provide certain other record-keeping and administrative services, and with Fidelity Management Trust Company (Fidelity Trust) to act as the Plan's custodian and trustee. Applied currently pays a portion of the expenses incurred in the administration of the Plan. Other expenses associated with the administration of the Plan are charged against the Plan and paid from Plan assets. Loan fees are paid by Plan participants who elect to receive a Plan loan. Withdrawal fees are paid by Plan participants who elect to receive certain types of withdrawals.

Brokerage commission fees associated with transactions in the Stock Fund are paid by Plan participants who transact in the Stock Fund. Total administrative expenses paid directly from Plan assets amounted to \$490,550 and \$468,714 in 2009 and 2008, respectively. These fees are insignificant to these financial statements, and are therefore reported as withdrawals. Other brokerage commissions and other charges incurred in connection with investment transactions under the Plan 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 contributions and Applied matching contributions are recorded in the period during which Applied withholds payroll deductions from participants' earnings. Benefits are recorded when paid.

Plan year

The Plan year is the twelve-consecutive month period beginning each January 1 and ending December 31.

Investments

Plan assets are held in trust 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. Except as described below, the Plan's investments are valued at fair value, as measured by quoted market prices, as of the last business 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.

The BNY Mellon Stable Value Fund (formerly named the Standish Mellon Stable Value Fund) (the Stable Value Fund) is a separate account that holds investments in synthetic guaranteed investment contracts (GICs). The investments in synthetic GICs are presented at fair value.

In determining the net assets available for benefits, synthetic GICs are recorded at their contract values, which are equal to principal balance plus accrued interest. An investment contract is generally valued at contract value, rather than fair value, to the extent it is fully benefit-responsive. The Statements of Net Assets Available for Benefits presents the fair value of the investment contracts as well as the adjustment of the fully benefit-responsive investment contracts from fair value to contract value. The Statements of Changes in Net Assets Available for Benefits is prepared on a contract value basis. Contract value represents contributions made under the contract, plus earnings, less participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value. There are currently no reserves against contract values for credit risk of the contract issuers.

Certain employer initiated events (e.g., layoffs, bankruptcy, plant closings, plan termination, mergers, early retirement incentives, employer communications designed to induce participants to transfer from the Stable Value Fund, competing fund transfer or violation of equity wash or equivalent rules in place and changes of qualification status of the employer or the Plan) are not eligible for book value disbursements even from fully benefit-responsive contracts. These events may cause liquidation of all or a portion of a synthetic GIC at a market value adjustment. If the likelihood of such a non-book value withdrawal event is imminent, it may be necessary to consider revaluation of those particular synthetic GICs. In general, synthetic GIC issuers may terminate the contract and settle at other than contract value if the qualification status of the employer or the Plan changes, or there is a breach of material obligations under the contract or misrepresentation of the contract holder, or failure of the underlying portfolio to conform to the pre-established investment guidelines.

The Stable Value Fund held fixed maturity, variable and constant duration synthetic GICs at December 31, 2009 and 2008. Generally, fixed maturity synthetic GICs consist of an asset or collection of assets that are owned by the Plan and a benefit-responsive, book value wrap contract. The wrap contract provides book value accounting for the asset and assures that book value, benefit-responsive payments will be made for participant-directed withdrawals. The credit rating for the wrap contract is set at the beginning of the wrap contract period and typically resets every quarter. Generally, fixed maturity synthetic GICs are held to maturity. The initial credit rating is established based on market interest rates at the time the initial asset is purchased. Fair values of fixed maturity synthetic GICs are calculated using the sum of all assets' market values provided by a third party vendor engaged by the Stable Value Fund manager.

Variable synthetic GICs consist of an asset or collection of assets that are managed by a bank or insurance company and are held in a bankruptcy-remote vehicle for the benefit of the Plan. The contract is benefit-responsive and provides next-day liquidity at book value. The credit rating resets quarterly based on current market index rates and an investment spread. The investment spread is established at the time of issuance and is guaranteed by the issuer for the life of the contract. Fair values for variable synthetic GICs are calculated using the present value of the contract's future cash flow values discounted by comparable swap rates.

Constant duration synthetic GICs consist of a portfolio of securities owned by the Plan and a benefit-responsive, book value wrap contract. The wrap contract amortizes gains and losses of the underlying securities over the contract duration, and assures that book value, benefit-responsive payments are made for participant-directed withdrawals. The credit rating on a constant duration synthetic GIC resets every quarter based on the book value of the contract and the market value of the underlying securities over the duration of the contract and therefore will be affected by movements in interest rates and changes in the market value of the underlying securities. The initial credit rating is established based on market interest rates at the time the underlying portfolio of securities is put together. Fair values for constant duration synthetic GICs are calculated using market values provided by external investment managers.

In the absence of an actively traded market, discounted cash flows are used to estimate synthetic GICs fair value.

The Stable Value Fund is credited with earnings on the underlying investments and charged for participant withdrawals and administrative expenses. The synthetic GICs issuers are contractually obligated to repay the principal and a specified interest rate that is guaranteed to the Plan.

Effective December 2009, the Plan's designated default investment option (the Default Fund) changed from the T. Rowe Price Personal Strategy Balanced Fund to the designated Vanguard Target Retirement Fund — Investor Shares that has a target retirement date closest to the year in which the applicable participant might retire, based on the participant's date of birth and assuming a retirement age of 65. The T. Rowe Price Personal Strategy Income, Balanced and Growth Funds were removed as investment options under the Plan and replaced with the Vanguard Target Retirement Funds — Investor Shares.

Effective January 2009, the Standish Mellon Stable Value Fund was renamed the BNY Mellon Stable Value Fund.

Effective March 2008, the Lord Abbett Small Cap Value Fund — Class I was removed as an investment option under the Plan and replaced with the Lord Abbett Small Cap Value Account, a separate account.

Effective January 2008, the Class A shares of Morgan Stanley Institutional Fund, Inc. — International Equity Portfolio were renamed Class I.

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 favorable determination letter dated April 11, 2008 to bring it into compliance with applicable law and to make other desired changes. The 401(k) Committee believes that the Plan is currently designed and being operated in compliance with the applicable requirements of the Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

Risks and uncertainties

The Plan provides participants with investment options consisting of various mutual funds, a common/collective trust, separate accounts and the Stock Fund (which invests solely in shares of Applied common stock (Shares)). The mutual funds, common/collective trust, and separate accounts offered under the Plan invest in stocks, bonds and other investment securities. Shares 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.

Recent accounting pronouncements

In January 2010, the Financial Accounting Standards Board issued Accounting Standards Update 2010-06, *Improving Disclosures about Fair Value Measurements*, which expanded the required disclosures about fair value measurements. In particular, this guidance requires: 1) separate disclosure of the amounts of significant transfers in and out of level 1 and level 2 fair value measurements along with the reasons for such transfers, 2) information about purchases, sales, issuances and settlements to be presented separately in the reconciliation for level 3 fair value measurements, 3) fair value measurement disclosures for each class of assets and liabilities and 4) disclosures about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements for fair value measurements that fall in either level 2 or level 3. This guidance is effective for annual reporting periods beginning after December 15, 2009, except for 2) above which is effective for annual reporting periods beginning after December 15, 2010. Applied is currently evaluating the impact that this guidance will have on the Plan's financial statement disclosures. See Note 2 — "Fair Value Measurements" for further details.

Note 2 — Fair Value Measurements

The fair value measurements standard establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy under the standard are described below:

- Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.
- Level 2 Inputs to the valuation methodology include:
 - Quoted market prices for similar assets or liabilities in active markets;
 - Quoted prices for identical or similar assets or liabilities in inactive markets;
 - Inputs other than quoted prices that are observable for the asset or liability;
 - Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 — Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The following is a description of the valuation methodologies used for fair value measurements of the Plan's investments. There have been no changes in the methodologies used at December 31, 2009 and 2008.

Mutual funds are public investment vehicles, which are valued using the Net Asset Value (NAV) provided by the administrator of the fund. The NAV is a quoted price in an active market and is based on the value of the underlying net assets owned by the fund divided by the number of shares outstanding. It is not probable that the mutual funds will be sold at amounts that differ materially from the NAV of shares held.

Applied common stock, corporate bonds and U.S. government securities are valued at the closing price reported on the active market on which the individual securities are traded.

Unitized common stock fund is a separately managed fund, which is valued using the NAV provided by the administrator of the fund. The NAV is a quoted price in an active market and is based on the value of the underlying net assets owned by the fund divided by the number of shares outstanding.

Common/collective trust (CCT) is valued using a discounted cash flow model, which considers recent fee bids as determined by recognized dealers, discount rate and the duration of the underlying portfolio securities. CCTs are not available in an exchange and active market, however, the fair value is determined based on the underlying investments as traded in an exchange and active market.

The Stable Value Fund primarily holds investments in GICs. GICs are fair valued by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the credit-worthiness of the issuer.

Participant loans are valued at amortized cost, which approximates fair value.

The valuation methodologies described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan administrator believes the valuation methodologies used are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at estimated fair value as of December 31, 2009 and 2008:

		Assets at fair value	as of December 31, 2009	
	Level 1	Level 2	Level 3	Total
Mutual funds:				
Fixed income funds	\$ 132,394	\$ —	s —	\$ 132,394
	* - /	5 —	5 —	· - /
Growth funds	278,245,014	_	_	278,245,014
Value funds	53,127,994		_	53,127,994
Blend fund	145,857,220	_	_	145,857,220
Target date funds	67,121,019			67,121,019
	· · · · · · · · · · · · · · · · · · ·			
Total mutual funds	544,483,641	_	_	544,483,641
Applied common stock	332,296,954	_	_	332,296,954
Stable value — fixed funds	-	159,013,165	_	159,013,165
Common/collective trust — bond fund	_	48,714,601	_	48,714,601
Unitized stock — blend fund	-	42,294,786	_	42,294,786
Participant loans	_	_	13,657,034	13,657,034
Total assets at estimated fair value	\$876,780,595	\$250,022,552	\$13,657,034	\$1,140,460,181

The table below sets forth a summary of changes in the estimated fair value of the Plan's level 3 assets, consisting of participant loans, for the year ended December 31, 2009.

				Level 3
Balance at January 1, 2009				\$13,258,849
Purchases, sales, issuances and settlements, net				398,185
Balance at December 31, 2009				\$13,657,034
		Assets at fair value as		T . 1
	Level 1	Level 2	Level 3	Total
Mutual funds	\$403,392,350	\$ —	\$ —	\$403,392,350
Applied common stock	262,255,652	_	_	262,255,652
Stable value fund	_	143,171,182	_	143,171,182
Common/collective trust	_	36,518,505	_	36,518,505
Unitized stock	_	35,057,173	_	35,057,173
Participant loans			13,258,849	13,258,849
Total assets at estimated fair value	\$665,648,002	\$214,746,860	\$13,258,849	\$893,653,711
	10			

The table below sets forth a summary of changes in the estimated fair value of the Plan's level 3 assets, consisting of participant loans, for the year ended December 31, 2008.

	Level 3
Balance at January 1, 2008 Purchases, sales, issuances and settlements, net	\$12,294,757 964,092
Balance at December 31, 2008	\$13,258,849

Note 3 — Participation and benefits

Participant contributions

The Plan allows eligible participants to elect to have Applied withhold up to 50 percent of their eligible pre-tax compensation for their contribution to the Plan, subject to a dollar limit established by the Code. The Plan also allows eligible participants who are age 50 or older during the Plan year to make catchup contributions up to 50 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.

Participants are also allowed to make rollover contributions of eligible amounts received from other tax-qualified employer-sponsored retirement plans or conduit individual retirement accounts.

Applied's matching contributions

Participants in the Plan become eligible to receive Applied's matching contributions immediately upon enrolling in the Plan and electing to make salary deferral contributions to the Plan.

Applied currently matches 100 percent of participant salary deferral contributions up to the first three percent of eligible pre-tax compensation contributed each payroll period and then 50 percent of every dollar between four percent and six percent of eligible pre-tax compensation contributed each payroll period. Applied does not make matching contributions on any catch-up contributions made by participants. Applied may change the matching contribution rate at any time, subject to the limits of the Plan and the Code.

Applied's matching contributions (if any) are made in the form of cash.

Participant accounts

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

Investment direction

The Plan allows participants to direct the investment of their Plan account balances in any of the investment options available under the Plan.

Effective December 2009, however, participants may invest no more than 20% of their future contributions in the Stock Fund and may make an exchange into the Stock Fund only to the extent it does not result in more than 20% of their total Plan account balances being invested in the Stock Fund (determined at the time of the exchange).

If a participant fails to choose an investment option for the contributions to his or her Plan account, such funds automatically are invested in the Default Fund until he or she selects a different investment option available under the Plan. The Default Fund selected for a participant is determined based on the age of the participant and the estimated year of retirement. In the case of any future cash dividends that are payable with respect to Shares held in the Stock Fund, however, if a participant has not made an affirmative election to either have the dividends reinvested in the Stock Fund or paid directly to him or her in cash before the dividend payment date, then the dividends automatically are reinvested in the Stock Fund.

Participants may change their investment elections under the Plan generally at any time, in accordance with the procedures established by the 401(k) Committee and Fidelity Trust.

Payment of benefits

Upon a Plan participant's termination of employment with Applied and all of its affiliates, the participant (or his or her beneficiary) may elect to receive a lump-sum cash distribution of his or her vested account balance. The terminated participant (or beneficiary) may also elect to receive whole Shares for any portion of his or her vested account balance that is invested in the Stock Fund.

In accordance with applicable law, a distribution of a Plan participant's vested account balance generally must be made or commenced no later than the April 1 immediately following the calendar year in which he or she attains age 70.5 or terminates employment with Applied and all of its affiliates, whichever is later. A participant's beneficiary must receive a distribution of the participant's entire vested account balance no later than the December 31 of the year that includes the fifth anniversary of the date of the participant's death.

Notwithstanding the foregoing, if a terminated participant's (or beneficiary's) vested account balance is equal to or less than \$1,000, a lump-sum payment of the vested account balance automatically will be distributed.

In accordance with the Plan's rules, a participant may receive an in-service withdrawal from certain portions of his or her vested account balance upon financial hardship (as defined in the Plan) or attainment of age 59.5. A participant who receives a financial hardship withdrawal will be (1) suspended from active participation in the Plan and in Applied's 2005 Executive Deferred Compensation Plan, if eligible, and (2) prohibited from exercising any option for Shares granted under an Applied-sponsored plan or participating in Applied's Employees' Stock Purchase Plan, for a period of at least six months following the withdrawal.

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 generally must be repaid to the Plan from bi-weekly payroll deductions over the loan term, which normally 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 and all of its affiliates, or the occurrence of certain other events. Specific loan terms and conditions are established by the 401(k) Committee. Outstanding loans at December 31, 2009 carry interest rates ranging from 4.25 percent to 10.50 percent maturing through 2018.

Vesting

Participants are immediately vested in their salary deferral, catch-up and/or any rollover contributions, and any related earnings thereon.

Participants who have two years of credited service as defined by the Plan will vest 20 percent each year in Applied's matching contributions (if any) allocated to their accounts, and will become fully vested after six years of credited service.

Participants who are employed by Applied or its affiliates become fully vested upon death, disability (as defined by the Plan) or attainment of normal retirement age under the Plan (age 65). Affected participants also become fully vested upon any termination of the Plan. 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 terminates his or her employment with Applied and its affiliates prior to becoming fully vested, the unvested portion of his or her matching contribution account balance generally will be forfeited. Forfeitures can be used to offset Applied's matching contributions, reinstate any previously forfeited matching contribution balances, and reinstate any closed account balances under the Plan. Forfeitures used to offset Applied's matching contributions in 2009 and 2008 were \$603,988 and \$991,413, respectively. Forfeitures payable at December 31, 2009 and 2008 was \$329,857 and \$38,808, respectively.

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

As allowed by the Plan, participants may elect to invest their Plan account balances in the Stock Fund. The Stock Fund invests solely in Shares. Aggregate investment in Shares at December 31, 2009 and 2008 was as follows:

	Number of shares	Fair value
2009	23,812,450	\$332,296,954
2008	25,863,570	\$262,255,652

Certain Plan investments are managed by Fidelity Trust, the custodian and trustee of the Plan, or its affiliates. Any purchases and sales of these funds are performed in the open market. Such transactions, while considered party-in-interest transactions under ERISA regulations, are permitted under the provisions of the Plan and are specifically exempt from the prohibition of party-in-interest transactions under ERISA.

Note 5 — Investments

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

	2009	2008
Applied Materials, Inc. Common Stock Fund	\$ 332,296,954	\$262,255,652
BNY Mellon Stable Value Fund*	159,013,165	143,171,182
Fidelity Contrafund	111,966,640	86,240,969
Morgan Stanley Institutional Fund, Inc. — International Equity Portfolio — Class I	85,824,640	71,171,203
T. Rowe Price Growth Stock Fund	73,772,371	51,734,790
Vanguard Mid-Cap Index Fund — Institutional Shares	66,586,312	45,622,158
Other funds individually representing less than 5% of net assets (including participant loans)	311,000,099	233,457,757
Assets held for investment purposes	\$1,140,460,181	\$893,653,711

^{*} Before January 1, 2009, the BNY Mellon Stable Value Fund was named the Standish Mellon Stable Value Fund.

The Stable Value Fund includes synthetic GICs that are benefit-responsive and are carried at fair value totaling \$159 million at December 31, 2009. There are no reserves against these synthetic GICs for credit risk of the contract issuer. Certain of the synthetic GICs contain limitations on contract value guarantees for liquidation other than to pay benefits. The average yield earned by the entire Stable Value Fund was 3.71% and 4.63% for the years ended December 31, 2009 and December 31, 2008, respectively. The average credited interest rate to the participants for the entire Stable Value Fund was 3.83% and 4.51% for the years ended December 31, 2009 and December 31, 2008, respectively. The Plan's investment guidelines require these contracts to be with companies rated AA or better, with no more than 40% invested with any one synthetic wrap provider.

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

	2009	2008
Mutual funds	\$132,294,984	(\$285,532,586)
Applied Materials, Inc. common stock	96,672,832	(187,575,264)
Common/collective trust	7,540,257	(2,776,430)
Total appreciation (depreciation)	\$236,508,073	\$ (475,884,280)
10		

Note 6 — Non-participant directed investments

As discussed in Note 3, the Plan allows participants (or their beneficiaries) to direct the investment of their account balances in any of the available investment options under the Plan. If a participant fails to choose an investment option for the contributions to his or her Plan account, such funds automatically are invested in the Default Fund until he or she selects a different investment option available under the Plan. In the case of any future cash dividends that are payable with respect to Shares held in the Stock Fund, however, if a participant (or beneficiary) fails to make an affirmative dividend election before the dividend payment date, the dividends automatically are reinvested in the Stock Fund.

Note 7 — Plan termination 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 or modify the Plan at any time and for any reason, subject to the provisions of ERISA. In the event the Plan is terminated, affected participants would become fully vested in their accounts.

Note 8 — Acquisitions and Transfers

On May 1, 2009, the outstanding account balances remaining under the Metron Technology Corporation 401(k) Retirement Plan (the Metron Plan), a 401(k) plan that had been sponsored by Metron Technology Corporation and terminated in connection with Applied's acquisition of Metron Technology N.V. in December 2004, were transferred to this Plan in a plan-to-plan transfer. As a result, Metron Plan assets of \$198,340 were transferred into the Plan at that time.

Note 9 — Reconciliation of Financial Statements to Form 5500

The following is a reconciliation of net assets available for benefits per the financial statements at December 31, 2009 and 2008 to Form 5500:

	2009	2008
Net assets available for benefits per the financial statements	\$1,138,689,207	\$902,372,903
Adjustment between fair value and contract value related to fully benefit-responsive investment contracts	2,361,741	(7,352,033)
Net assets available for benefits per Form 5500	\$1,141,050,948	\$895,020,870

The following is a reconciliation of total investment income per the financial statements for the year end December 31, 2009 to total income Form 5500:

	2009
Total investment income per the financial statements	\$255,901,905
Adjustment between fair value and contract value related to fully benefit-responsive investment contracts	9,713,774
Total income per Form 5500	\$265,615,679

Note 10 — Subsequent Events

Plan participants who were employed by Applied or any of its affiliates on or after January 1, 2010 became 100% vested in their Applied matching contribution account balances.

Effective July 21, 2010, the American Funds EuroPacific Growth Fund - Class R6 will be added as an investment option under the Plan and the Core Plus Bond Fund, the Fidelity Equity-Income Fund, and the Fidelity Contrafund will be removed as investment options under the Plan and replaced with the Pyramis Core Plus Commingled Pool — Class G, the Fidelity Equity-Income Fund — Class K, and the Fidelity Contrafund - Class K, respectively.

The Plan has evaluated subsequent events through June 25, 2010, which is the date the financial statements were available to be issued.

APPLIED MATERIALS, INC. EIN: 94-1655526 EMPLOYEE SAVINGS AND RETIREMENT PLAN (PLAN #333)

SUPPLEMENTAL SCHEDULE

SCHEDULE H, PART IV, LINE 4i — SCHEDULE OF ASSETS (HELD AT END OF YEAR) DECEMBER 31, 2009

(a)	(b) Identity of issuer, borrower, lessor or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par or maturity value (1)	(e) Current value
*	Fidelity Equity-Income Fund	1,357,384 shares	\$ 53,127,994
*	Fidelity Contrafund	1,921,185 shares	111,966,640
*	Spartan U.S. Equity Index Fund — Investor Class	964,316 shares	38,022,990
	Morgan Stanley Institutional Fund, Inc. — International Equity		
	Portfolio — Class I	6,591,754 shares	85,824,640
	T. Rowe Price Growth Stock Fund	2,681,657 shares	73,772,371
	Vanguard Explorer Fund — Admiral Class	125,354 shares	6,681,363
	Vanguard Mid-Cap Index Fund — Institutional Shares	4,060,141 shares	66,586,312
	Vanguard Small-Cap Index Fund — Institutional Shares	1,499,924 shares	41,247,918
	Vanguard Target Retirement 2005 Fund	123,213 shares	1,352,879
	Vanguard Target Retirement 2010 Fund	74,254 shares	1,523,693
	Vanguard Target Retirement 2015 Fund	480,894 shares	5,438,917
	Vanguard Target Retirement 2020 Fund	559,841 shares	11,174,416
	Vanguard Target Retirement 2025 Fund	1,378,756 shares	15,607,514
	Vanguard Target Retirement 2030 Fund	744,660 shares	14,379,385
	Vanguard Target Retirement 2035 Fund	908,734 shares	10,559,488
	Vanguard Target Retirement 2040 Fund	252,379 shares	4,807,821
	Vanguard Target Retirement 2045 Fund	162,624 shares	1,954,738
	Vanguard Target Retirement 2050 Fund	16,859 shares	322,168
	Vanguard Target Retirement Income Fund	12,502 shares	132,394
		Total Mutual Funds	544,483,641
*	Applied Materials, Inc. Common Stock Fund	23,812,450 shares	332,296,954
	BNY Mellon Stable Value Fund	Various Products	159,013,165
*	Core Plus Bond Fund	3,571,249 shares	48,714,601
	Lord Abbett Small Cap Value Account	Various Products	42,294,786
*	Participant loans	Interest at 4.25% to 10.50%, maturing	
		through 2018	13,657,034
		-	
		Total	\$1,140,460,181

⁽¹⁾ Column (d), cost information, is not provided as all investments are participant or beneficiary directed (including negative elections authorized under the Plan's terms).

^{*} Indicates party-in-interest to the Plan.

SIGNATURE

Pursuant to the requirements 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

Date: June 25, 2010

By /s/ Ron Miller

Ron Miller

Corporate Vice President, Global Rewards

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Exhibit Index

Exhibit Number		Description
23.1	Consent of Independent Registered Public Accounting Firm	

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statements on Form S-8 (No. 33-52072, No. 333-31289 and No. 333-124711) of Applied Materials, Inc. of our report dated June 25, 2010, with respect to the statements of net assets available for benefits of the Applied Materials, Inc. Employee Savings and Retirement Plan as of December 31, 2009 and 2008 and the related statements of changes in net assets available for benefits for the years then ended and the related supplemental Schedule H, part IV, line 4i-schedule of assets (held at end of year), included in this Annual Report on Form 11-K.

ARMANINO McKENNA LLP San Ramon, California

June 25, 2010