AGILENT TECHNOLOGIES INC Form 11-K June 19, 2008

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.

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2007.

OR

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

FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER: 001-15405

A. FULL TITLE OF THE PLAN AND THE ADDRESS OF THE PLAN, IF DIFFERENT FROM THAT OF THE ISSUER NAMED BELOW:

AGILENT TECHNOLOGIES, INC.

401(K) PLAN

B. NAME OF ISSUER OF THE SECURITIES HELD PURSUANT TO THE PLAN AND THE ADDRESS OF ITS PRINCIPAL EXECUTIVE OFFICE:

AGILENT TECHNOLOGIES, INC.

5301 STEVENS CREEK BOULEVARD

SANTA CLARA, CALIFORNIA 95051

AGILENT TECHNOLOGIES, INC.

401(k) PLAN

Financial Statements and Supplemental Schedule

December 31, 2007 and 2006

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Participants and

Plan Administrator of the

Plan Administrator of the

Agilent Technologies, Inc.

401(k) Plan

We have audited the financial statements of the Agilent Technologies, Inc. 401(k) Plan (the Plan) as of December 31, 2007 and 2006, 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 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. We were not engaged to perform an audit of the Plan s internal control over financial reporting. Our audits included consideration 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 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 the Plan s 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, 2007 and 2006, 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, as listed in the accompanying table of contents, 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 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.

/s/ MOHLER, NIXON & WILLIAMS Accountancy Corporation

Campbell, California June 17, 2008

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AGILENT TECHNOLOGIES, INC.

401(k) PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

(in thousands)

	Decem		
	2007		2006
Assets:			
Investments, at fair value	\$ 1,877,338	\$	1,757,409
Participant loans	10,676		10,490
Assets held for investment purposes	1,888,014		1,767,899
Employer s contribution receivable			3,200
Accrued income receivable	98		2
Receivable from broker for securities sold	184		1,002
Total assets	1,888,296		1,772,103
Liabilities:			
Accrued fees payable	242		78
Payable to broker for securities purchased	597		226
·			
Total liabilities	839		304
Net assets available for benefits at fair value	1,887,457		1,771,799
Adjustment from fair value to contract value for fully benefit-responsive investment contracts	3,857		4,864
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Net assets available for benefits	\$ 1,891,314	\$	1,776,663

See notes to financial statements.

AGILENT TECHNOLOGIES, INC.

401(k) PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

(in thousands)

	Years Decem			
	2007		2006	
Additions to net assets attributed to:				
Investment income:				
Dividends and interest	\$ 110,176	\$	145,156	
Net realized and unrealized appreciation in fair value of investments	68,792		41,155	
	178,968		186,311	
Contributions:				
Participants	77,213		82,316	
Employer s	26,568		26,119	
	103,781		108,435	
Total additions	282,749		294,746	
Deductions from net assets attributed to withdrawals and distributions	168,098		246,802	
Net increase prior to transfer	114,651		47,944	
Transfer of assets to the Verigy Ltd. 401(k) Plan in 2006			(57,715)	
Net increase (decrease) in net assets	114,651		(9,771)	
Net assets available for benefits:				
Beginning of year	1,776,663		1,786,434	
End of year	\$ 1,891,314	\$	1,776,663	

See notes to financial statements.

AGILENT TECHNOLOGIES, INC.

401(k) PLAN

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2007 AND 2006

NOTE 1 - THE PLAN AND ITS SIGNIFICANT ACCOUNTING POLICIES

General - The following description of the Agilent Technologies, Inc. 401(k) Plan (the Plan) provides only general information. Participants should refer to the Plan document for a more complete description of the Plan s provisions.

The Plan is a defined contribution plan that was established in 2000 by Agilent Technologies, Inc. (the Company) to provide benefits to eligible employees, as defined in the Plan document. The Plan administrator believes that the Plan is currently designed and operated in compliance with the applicable requirements of the Internal Revenue Code of 1986, as amended (the Code), and the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), as amended. The Company intends that the Plan be qualified pursuant to Sections 401(a) and 401(k) of the Code.

In June 2007, the Company acquired Stratagene. The Board of Directors of Stratagene voted to terminate the Stratagene plan effective June 6, 2007 and plan assets were distributed to participants as soon as administratively practical, subject to the provisions of ERISA. Employees retained by the Company became eligible to participate in the Plan effective June 7, 2007.

Administration - The Board of Directors of the Company has appointed a Benefits Committee (the Committee) with certain authority to manage the policy, design and administration of the Plan. The Company has contracted with Fidelity Management Trust Company (Fidelity) to act as the trustee and an affiliate of Fidelity to process and maintain the records of participant data. Substantially all expenses incurred for administering the Plan are paid by the Company.

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

Basis of accounting - The financial statements of the Plan are prepared on the accrual method of accounting in accordance with accounting principles generally accepted in the United States of America. Sales and purchases are recorded on the trade date. Benefits are recorded when paid. Dividends are recorded on the ex-dividend date.

As described in Financial Accounting Standards Board (FASB) Staff Position, FSP AAG INV-1, Reporting of Fully Benefit Responsive Investment Contracts Held by Certain Investments Companies Subject to the AICPA Investment Company Guide and Defined-Contribution, Health and Welfare, and Pension Plans (the FSP), investment contracts held by a defined-contribution plan are required to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined-contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount the participants would receive if they were to initiate permitted transactions under the terms of the plan. As required by the FSP, the statements of net assets available for benefits present the fair value of the investment contracts as well as the adjustment to fully benefit-responsive investment contracts from fair value to contract value. The statements of changes in net assets available for benefits are prepared on a contract value basis.

Investments - Investments of the Plan are held by Fidelity, as trustee, and invested based solely upon instructions received from participants.

Investments - Investments of the Plan are held by Fidelity, as trustee, and invested based solely upon instractions r

The Plan s investments in Company common stock, Verigy Ltd. common stock (an investment option that was given as a dividend to Company common stock shareholders on October 31, 2006 and which was completely

liquidated on April 30, 2007), and mutual funds are valued at fair value as of the last day of the Plan year, as measured by quoted market prices. Bank collective funds are valued at fair value as of the last day of the Plan year, as reported to the Plan by Fidelity. Participant loans are valued at cost, which approximates fair value.

Stable Value Fund - The Plan s Stable Value Fund is comprised primarily of investments in bank collective funds and synthetic investment contracts (synthetic GICs). Since the Stable Value Fund is fully benefit responsive, contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the investments included in the Stable Value Fund. Contract value represents contributions made plus interest accrued at the contract rate, less withdrawals. Synthetic investment contracts consist of various contracts with banks or other institutions which provide for fully benefit-responsive withdrawals and transfers by Plan participants in the Stable Value Fund at contract value.

As of December 31, 2007 and 2006, the Plan s synthetic GICs consist of the following:

As of December 31, 2006:

Carrier Name	Major credit ratings	Year-end contract value	Investments at fair value(1)	Investment contracts at fair value	Adjustments to contract value(2)
Synthetic GICs					
Bank of America, N.A.	AA/Aa1	\$ 32,711,766	\$ 32,000,061	\$ 15,263	\$ 696,442
IXIS Financial Products Inc.	AAA/Aaa	3,773,664	3,279,491		494,173
IXIS Financial Products Inc.	AAA/Aaa	57,706,923	56,225,963		1,480,960
JPMorgan Chase Bank	AA-/Aa2	32,712,035	32,000,036		711,999
Monumental Life Insurance					
Co.	AA/Aa3	57,702,552	56,221,286		1,481,266
Total		\$ 184,606,940	\$ 179,726,837	\$ 15,263	\$ 4,864,840

Note: Total year-end contract value and investments at fair value do not include assets held in cash, which are \$453,448 as of December 31, 2006.

⁽²⁾ Adjustments from fair value to contract value for fully benefit-responsive investment contracts.

As of December 31, 2007:

Carrier Name	Major credit ratings	Year-end contract value	Investments at fair value(3)	Investment contracts at fair value	Adjustments to contract value(4)
Synthetic GICs					
Bank of America, N.A.	AA+/Aaa	\$ 32,187,045	\$ 31,742,597	\$	\$ 444,448
Natixis Financial Products					
Inc.	AAA/Aaa	4,767,522	4,588,916	31,512	147,094
Natixis Financial Products					
Inc.	AAA/Aaa	55,516,423	54,106,751		1,409,672
JPMorgan Chase Bank	AA/Aaa	32,187,022	31,742,515		444,507
Monumental Life Insurance					
Co.	AA/Aa3	55,510,314	54,099,393		1,410,921
Total		\$ 180,168,326	\$ 176,280,172	\$ 31,512	\$ 3,856,641

Note: Total year-end contract value and investments at fair value do not include assets held in cash, which are \$3,238,722 as of December 31, 2007.

(4) Adjustments from fair value to contract value for fully benefit-responsive investment contracts.

There are no reserves against contract value for credit risk of the contract issuer or otherwise. The crediting interest rate is based on a formula agreed upon with the contract issuer, but it may not be less than zero. Such interest rates are reviewed on a periodic basis for resetting. The relationship of future crediting rates and the adjustment to contract value reported on the statements of net assets available for benefits is provided through the mechanism of the crediting rate formula. The difference between the contract value and the fair market value of the investments of each contract is periodically amortized into each contract s crediting rate. The amortization factor is calculated by dividing the difference between the fair market value of the investment and the contract value of the duration of the bond portfolio covered by the investment contract.

The average yields on the fund are as follows for the years ended December 31:

	2007	2006
Average yields:		
Based on actual earnings	4.85%	5.52%
Based on interest rate credited to participants	4.95%	4.52%

The key factors that could influence future interest crediting rates include, but are not limited to: (1) the Plan cash flows, (2) changes in interest rates, (3) total return performance of the fair market value bond strategies underlying each synthetic GIC contract, (4) default or credit failures of any of the securities, investment contracts or other investments held in the fund or (5) the initiation of an extended termination of one or more of the synthetic GIC contracts by the contract issuer.

Certain employer initiated events or other external events not initiated by plan participants will limit the ability of the Plan to transact at contract value with the issuer. Such events include the following: (1) Plan s failure to qualify under the Internal Revenue Code of 1986 as amended, (2) amendments to the Plan documents (including complete or partial Plan termination or merger with another plan), (3) changes to the Plan s prohibition on competing investment options or establishment of a competing plan by the Plan sponsor, (4) bankruptcy of the Plan sponsor or other Plan sponsor events (for example, divestitures or spin-offs of a subsidiary) that cause a significant withdrawal from the Plan or (5) events resulting in a material and adverse financial impact on the contract issuer, including changes in the tax code, laws or regulations. The Plan administrator does not believe that the occurrence of any such value event, which would limit the Plan s ability to transact at contract value with participants, is probable.

The synthetic GICs do not permit the contract issuer to terminate the agreement prior to the scheduled maturity date unless there is a breach in contract which is not corrected within the specified cure period.

Income taxes - The Plan has been amended since receiving its latest favorable determination letter dated January 2, 2003. The Company believes that the Plan is operated in accordance with, and qualifies under, the applicable

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requirements of the Code and related state statutes, and that the trust, which forms a part of the Plan, is exempt from federal income and state franchise taxes.

Risks and uncertainties - The Plan provides for various investment options in any combination of investment securities offered by the Plan, including the Company s common stock. Investment securities are exposed to various risks, such as interest rate, market fluctuations and credit risks. Due to the risk associated with certain investment securities, it is at least reasonably possible that changes in market values, interest rates or other factors in the near term would materially affect participants account balances and the amounts reported in the statements of net assets available for benefits and the statements of changes in net assets available for benefits.

New accounting pronouncement - In September 2006, the FASB issued Statement of Financial Accounting Standards (SFAS) No. 157, Fair Value Measurements. SFAS No. 157 establishes a single authoritative definition of fair value, sets out a framework for measuring fair value and requires additional disclosures about fair value measurements. SFAS No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007. Management does not believe the impact of the new accounting pronouncement will be material to the financial statements.

NOTE 2 - RELATED PARTY TRANSACTIONS

Certain Plan investments are managed by an affiliate of Fidelity, the trustee of the Plan. Any purchases and sales of these funds are performed in the open market at fair value. 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.

As allowed by the Plan, participants may elect to invest a portion of their accounts in the Agilent Technologies Stock Fund (the Fund), which is primarily invested in shares of Company common stock. Investments in the Fund are at the direction of the Plan participants. Participants are not permitted to allocate more than 25% of their total contributions, including Company matching contributions, to the Fund and the maximum amount of the participant s account balance that can be allocated to the Fund is limited to 25% of the participant s account. The shares of Company common stock are traded in the open market.

NOTE 3 - PARTICIPATION AND BENEFITS

Eligibility - Employees who are eligible to participate in the Plan include those employees of the Company and its designated domestic subsidiaries who are on the U.S. dollar payroll and who are employed as regular full-time or regular part-time employees of the Company. There is no waiting period for eligibility.

Participant contributions - Upon initially becoming an eligible employee, a participant is deemed to have elected a 3% deferral effective on the first day of commencement of participation, unless that employee makes a change to that election in the manner prescribed by the Plan. Participating employees can elect to have the Company contribute up to 50% of their eligible pre-tax compensation, not to exceed the amount allowable under the Plan document and current income tax regulations. Participants who elect to have the Company contribute a portion of their compensation to the Plan agree to accept an equivalent reduction in taxable compensation. Contributions withheld are invested in accordance with the participant s direction. The Plan also allows eligible participants to make a catch-up contribution up to the maximum allowed under current income tax regulations.

Participants are also allowed to make rollover contributions of eligible distributions received from other tax-qualified employer-sponsored retirement plans. Such contributions are deposited in the appropriate investment funds in accordance with the participant s direction and the Plan s provisions.

Employer contributions - The Company makes matching contributions as required by the Plan document. In 2007 and 2006, the Company matched 100% of the employee s salary deferral for the first 3% of employee s eligible pre-tax compensation, and 50% of the employee s salary deferral for the next 2% of employee s eligible pre-tax compensation. The Company matching contribution was deposited into the individual employee s Plan account after the end of each of the Company s fiscal quarters, which are January 31, April 30, July 31 and October 31. To receive the Company match, the participant must be an employee of the Company at these dates, consistent with the terms of the Plan, except for certain retirees and deceased employees who either retired or died during the fiscal quarter. Effective November 21, 2007, the Plan was amended to change the matching contributions from a quarterly match to a pay period match.

Both employee deferrals and Company contributions in 2007 and 2006 have been made in cash for all funds; however, Company contributions may be made in either cash or common stock of the Company. No Company contributions have been made in the form of common stock of the Company in 2007 and 2006.

Vesting - Participants are 100% vested in their salary deferrals, rollover contributions, and Company matching contributions, subject to the terms of the Plan.

Participant accounts - Each participant s account is credited with the participant s salary deferrals, Plan earnings or losses and an allocation of the Company s matching contribution. Allocation of the Company s matching contribution is based on participant salary deferrals, as defined in the Plan.

Participants can transfer their invested funds among the available investment options and/or change the investment of their future contributions as often as desired. These transfers and changes must be made in whole percent increments. Initial contributions for new hires were automatically invested in the retirement age-appropriate Fidelity Freedom Fund, the fund designated as the Plan default fund, until the participant made a change to that investment election. The Fidelity Freedom Fund was selected as the Plan s default fund because each fund is a blend of stocks, bonds and short-term investments designed to provide an age-appropriate asset allocation for an investor based on his or her targeted retirement date.

Payment of benefits - Upon termination of employment, the participants or beneficiaries may elect to leave their account balance in the Plan, or receive their total benefits in a lump sum amount equal to the value of the participant s interest in their account in the form of rollovers or payments in cash and stock. The Plan allows for automatic lump sum distribution of participant account balances that do not exceed \$1,000.

Loans to participants - The Plan allows participants to borrow not less than \$1,000 and up to the lesser of \$50,000 or 50% of their account balance. The loans are secured by the participant s balance. Such loans bear interest at a rate fixed at the time of the loan at the prime rate plus one-half percent and must be repaid to the Plan between one year and four years. Generally, loans are repaid semi-monthly via automatic payroll deduction. The Plan allows terminated participants to electronically continue to repay their loan after termination of employment. The specific terms and conditions of such loans are established by the Committee. Outstanding loans at December 31, 2007 carry interest rates ranging from 4.5% to 10%.

NOTE 4 PLAN TRANSFER

In June 2006, the Company spun off its semiconductor test solutions business to a subsidiary named Verigy Ltd. and plan assets of approximately \$57,715,000 were transferred from the Plan to the Verigy Ltd. 401(k) Plan via a trust-to-trust asset transfer. Verigy Ltd. became an independent company on October 31, 2006.

NOTE 5 - INVESTMENTS

The number of shares of the Company common stock in the Fund was 3,136,707 and 4,168,790 as of December 31, 2007 and 2006, respectively. The fair value of the Company common stock included in the Fund was approximately \$115,243,000 and \$145,282,000 at December 31, 2007 and 2006, respectively. The Fund assigns units of participation to those participants with account balances in the Fund. The total number of units in the Fund at December 31, 2007 and 2006 was 4,257,670 and 5,667,186 respectively, and the net unit value was \$27.20 and \$25.82 respectively, at these dates. The Fund is comprised primarily of Company common stock purchased on the open market. The Fund also includes a minor investment in the Fidelity Institutional Money Market Fund.

The number of shares of Verigy Ltd. common stock in the Verigy Stock Fund (the Verigy Fund) was 483,649 as of December 31, 2006. The fair value of the Verigy Ltd. common stock included in the Verigy Fund was approximately \$8,585,000 at December 31, 2006. The Verigy Fund assigned units of participation to those participants with account balances in the Verigy Fund. The total number of units in the Verigy Fund at December 31, 2006 was 657,941 and the net unit value was \$13.15.

The Verigy Fund was eliminated effective at the close of the market on April 30, 2007. Any assets remaining in this fund as of the liquidation date were transferred to the Plan default fund.

The following table is a summary of the fair or contract values of investments and investment funds that represent 5% or more of the Plan s net assets at December 31 (in thousands):

	2007	2006
Pyramid Intermediate Fixed Income Fund	\$ 108,206	\$ 115,727
Fidelity Contrafund	294,034	250,461
Fidelity Magellan Fund	220,723	205,936
Fidelity Low-Priced Stock Fund	131,545	150,374
Spartan U.S. Equity Index Advantage Class Fund	204,161	133,875
Templeton Foreign Fund A	138,483	111,132
Agilent Technologies, Inc. common stock	115,243	145,282

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

	2007	2006
Common stock	\$ 8,748 \$	15,927
Bank collective funds	11,083	12,279
Collective trust funds	(3,729)	
Mutual Funds	52,690	12,949
	\$ 68,792 \$	41,155

NOTE 6 - RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500 (in thousands):

	December 31,					
		2007		2006		
Net assets available for benefits per the financial						
statements	\$	1,891,314	\$	1,776,663		
Adjustment from contract value to fair value for fully						
benefit-responsive investment contracts		(3,857)		(4,864)		
Net assets available for benefits at fair value per the						
Form 5500	\$	1,887,457	\$	1,771,799		

As described in Note 1, fully benefit-responsive investment contracts are reported at fair value in the Form 5500 and are reported at contract value in the financial statements.

The following is a reconciliation of the affected components of the changes in net assets available for benefits per the financial statements to the Form 5500 (in thousands):

		Y	ear ended	December 31, 2007		
	f	ounts per the inancial atements	Adjus	stment to fair value	A	Amounts per the Form 5500
Unrealized appreciation (depreciation)		<0. = 0.		4.00=		co =00
of assets	\$	68,792	\$	1,007	\$	69,799

		Y	ear ende	d December 31, 2006		
	Amounts per the financial statements		Adjustment to fair value			Amounts per the Form 5500
Unrealized appreciation (depreciation)						
of assets	\$	41,155	\$	(4,864)	\$	36,291

NOTE 7 - PLAN TERMINATION OR MODIFICATION

The Company intends to continue the Plan indefinitely for the benefit of its participants; however, it reserves the right to terminate or modify the Plan at any time by resolution of its Board of Directors and subject to the provisions of ERISA.

NOTE 8 - SUBSEQUENT EVENT

The Company has filed an application for a new favorable determination letter with the Internal Revenue Service on January 31, 2008.

AGILENT TECHNOLOGIES, INC. 401(k) PLAN

EIN: 77-0518772 PLAN #003

SCHEDULE H, LINE 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR) DECEMBER 31, 2007

(in thousands)

	Identity of issue, borrower, lessor or similar party	Description of investment including maturity date, rate of interest, collateral, par or maturity value	Current Value
	Stable Value Fund Holdings:		
*	Fidelity Institutional Money Market	Short-Term Investment	\$ 3,239
	Pyramid Intermediate Fixed Income Fund	Bank Collective Fund	108,206
	Pyramid Short Managed Maturing	Bank Collective Fund	32,288
	Pyramid Intermediate Managed Maturing	Bank Collective Fund	31,197
	Total bank collective funds	Built Content of Gild	171,691
	Natixis BRIC Contract		
	Thornburg Mortgage Securities Trust	Fixed Income Investments	1,651
	GS Mortgage Securities Corporation II	Fixed Income Investments	1,031
	Master Asset Backed Securities Trust	Fixed Income Investments	1,191
	Saxon Asset Securities Trust	Fixed Income Investments	1,734
	Total fixed income investments	Taxed meome investments	4,620
	Total fixed income investments		4,020
	Total fair value of underlying assets of Stable Value Fund		179,550
			15.661
	Barclays Global Investors US Debt Index	Bank Collective Fund	15,661
	Barclays Global Investors EAFE Equity Index	Bank Collective Fund	91,834
	State Street Global Advisors TIPS Fund	Bank Collective Fund	18,938 31,089
	Harbor Capital Appreciation Fund	Mutual Fund	· · · · · · · · · · · · · · · · · · ·
	Templeton Foreign Fund A PIMCO Total Return Fund	Mutual Fund Mutual Fund	138,483 93,168
			6,922
	Domini Social Equity Fund Goldman Sachs US Small Cap Value Equity Fund	Mutual Fund Mutual Fund	29,565
	Copper Rock Small Cap Growth Collective Trust	Mutuai Fulid	29,303
	Fund	Collective Trust Fund	44.696
*	Fidelity Institutional Money Market Fund	Money Market	642
*	Agilent Technologies, Inc. common stock	Common Stock	115,243
*	Fidelity Magellan Fund	Mutual Fund	220,723
*	Fidelity Contrafund	Mutual Fund	294,034
*	Fidelity Low-Priced Stock Fund	Mutual Fund	131,545
*	Spartan Extended Market Index	Mutual Fund	72,156
*	Spartan U.S. Equity Index Advantage Class Fund	Mutual Fund	204,161
*	Fidelity Freedom Income Fund	Mutual Fund	1,686
*	Fidelity Freedom 2000	Mutual Fund	931
*	Fidelity Freedom 2010	Mutual Fund	18,315
*	Fidelity Freedom 2020	Mutual Fund	30,178

*	Fidelity Freedom 2030	Mutual Fund	12,291
*	Fidelity Freedom 2040	Mutual Fund	8,301
*	Fidelity Freedom 2005	Mutual Fund	4,178
*	Fidelity Freedom 2015	Mutual Fund	22,763
*	Fidelity Freedom 2025	Mutual Fund	24,262
*	Fidelity Freedom 2035	Mutual Fund	8,207
*	Fidelity Freedom 2045	Mutual Fund	549
*	Fidelity Freedom 2050	Mutual Fund	1,616
	AllianceBernstein US Value Equities Portfolio		
*	Fidelity Institutional Money Market Fund	Money Market	<u>52</u>
	AT&T Inc.	Common Stock	1,908
	Abbott Laboratories	Common Stock	34
	Alcoa Inc.	Common Stock	471
	Allied Waste Industries Inc.	Common Stock	247
	Allstate Corp	Common Stock	491
	Altria Group Inc.	Common Stock	930
	American Electric Power Co Inc.	Common Stock	410
	Amer Intl Group Inc.	Common Stock	1,090
	Amerisourcebergen Corp	Common Stock	323
	Ameriprise Financial Inc.	Common Stock	342
	Apple Inc.	Common Stock	218
	Arrow Electronics Inc.	Common Stock	291
	Ashland Inc.	Common Stock	180
	ATMOS Energy Corp	Common Stock	154
	Autoliv Inc.	Common Stock	242
	Autonation Inc.	Common Stock	177
	Avis Budget Group	Common Stock	81
	Avnet Inc.	Common Stock	266
	BP PLC Spon Adr	Common Stock	278
	Ball Corp	Common Stock	275
	Bank of America Corp	Common Stock	1,415
	Bemis Inc.	Common Stock	170
	Black & Decker Corp	Common Stock	251
	Brunswick Corp	Common Stock	92
	CBS Corp	Common Stock	395
	Cardinal Health Inc.	Common Stock	323
	Caterpillar Inc.	Common Stock	392
	Chevron Corp	Common Stock	1,540
	Chubb Corp	Common Stock	442
	CISCO Systems Inc.	Common Stock	238
	CITIGROUP Inc.	Common Stock	1,110
	Cleveland-Cliffs Inc.	Common Stock	262
	Clorox Co	Common Stock	176
	Coca Cola Co	Common Stock	160
	ComCast Corp	Common Stock	469
	Ace Ltd	Common Stock	426
	Conoco Phillips	Common Stock	1,201
	Flextronics International Ltd	Common Stock	294
	Dean Foods Co	Common Stock	212

Disney (Walt) Co	Common Stock	558
Discover Fin Svcs	Common Stock	121
Everest Reinsurance Group Ltd	Common Stock	141
Dow Chemical Co	Common Stock	493
Dupont EI De Nemours & Co	Common Stock	489
Partner RE Ltd	Common Stock	281
Eaton Corp	Common Stock	388
Deutsche Bank AG (USA)	Common Stock	311
Ingersoll Rand Co Ltd	Common Stock	358
Electronic Data Systems Corp	Common Stock	330
EMBARQ Corp	Common Stock	327
Ericsson (LM) Tel Co	Common Stock	276
Exxon Mobil Corp	Common Stock	2,548
Fannie Mae	Common Stock	508
Gannett Inc.	Common Stock	332
GAP Inc.	Common Stock	396
General Electric Co.	Common Stock	2,421
General Motors Corp	Common Stock	319
Genworth Financial Inc.	Common Stock	349
Glaxosmithkline PLC	Common Stock	282
Goldman Sachs Group Inc.	Common Stock	387
Google Inc.	Common Stock	207
Hartford Finl Svcs Group Inc.	Common Stock	436
Hess Corp	Common Stock	545
Hewlett-Packard Co	Common Stock	141
Hubbell Inc.	Common Stock	77
IDEARC Inc.	Common Stock	155
Ingram Micro Inc.	Common Stock	206
Intel Corp	Common Stock	192
IBM Corp	Common Stock	724
JP Morgan Chase & Co	Common Stock	1,196
Johnson & Johnson	Common Stock	634
Jones Apparel Group Inc.	Common Stock	158
KB Home	Common Stock	117
Kellogg Co	Common Stock	173
Kraft Foods Inc.	Common Stock	62
Kroger Co	Common Stock	339
Leggett & Platt Inc	Common Stock	183
LexMark International Inc.	Common Stock	202
Lockheed Martin Corp	Common Stock	368
Macys Inc.	Common Stock	310
Marathon Oil Corp	Common Stock	280
Mattel Inc.	Common Stock	305
McDonalds Corp	Common Stock	106
McKesson Corp	Common Stock	347
Merck & Co Inc.	Common Stock	662
MetlLife Inc.	Common Stock	487
MicroSoft Corp	Common Stock	926
Morgan Stanley	Common Stock	632
National Semiconductor Corp	Common Stock	297
*		

	Northrop Grumman Corp	Common Stock	440
	Occidental Petroleum Corp	Common Stock	115
	Office Depot Inc.	Common Stock	228
	Oracle Corp	Common Stock	43
	Paccar Inc.	Common Stock	365
	Pepsico Inc.	Common Stock	425
	Pfizer Inc.	Common Stock	1,257
	Pitney-Bowes Inc.	Common Stock	304
	Procter & Gamble Co	Common Stock	1,373
	Progressive Corp Ohio	Common Stock	395
	Rowan Companies Inc.	Common Stock	225
	Royal Dutch Shell Plc Adr	Common Stock	286
	Sara Lee Corp	Common Stock	337
	Schlumberger Ltd	Common Stock	108
	Sonoco Products Co	Common Stock	196
	Sovereign Bancorp Inc.	Common Stock	138
	Sprint Nextel Corp	Common Stock	458
	SuperValu Inc.	Common Stock	338
	Target Corp	Common Stock	290
	Terex Corp	Common Stock	282
	3M Co	Common Stock	455
	Time Warner Inc.	Common Stock	76
	TorchMark Corp	Common Stock	315
	Total SA Spons Adr	Common Stock	314
	Toyota Motor Corp	Common Stock	276
	Travelers Companies Inc.	Common Stock	527
	Tyson Foods Inc.	Common Stock	202
	United Parcel Service Inc.	Common Stock	304
	UNUM Group	Common Stock	335
	Verizon Communications Inc.	Common Stock	1,066
	Viacom Inc.	Common Stock	382
	Vodafone Group	Common Stock	284
	Wachovia Corp	Common Stock	734
	Wal Mart Stores Inc.	Common Stock	689
	Wellpoint Inc.	Common Stock	314
	Wells Fargo & Co	Common Stock	555
	Total fair value of Common Stock		54,489
	TALE: 1 CAUS D. A. HOM I E. W.		54.541
	Total fair value of AllianceBernstein US Value Equities	Interest hearing each	54,541
ψ.	Cash	Interest bearing cash	1,110
Ψ	Participant loans	Interest rates ranging from 4.5% to 10%	10,676
		Total \$	1.888.014
		i otal 5	1,000,014

* Party-in-interest

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

AGILENT TECHNOLOGIES, INC 401(k) PLAN

Dated: June 19, 2008 By: /s/ HILLIARD C. TERRY, III

Hilliard C. Terry, III Vice President, Treasurer

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EXHIBIT INDEX

Exhibit	
Number	Description
23.1	Consent of Mohler, Nixon & Williams Accountancy Corporation

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