FORM 4

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

OMB APPROVAL
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

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(Print or Typ	e Responses))														
1. Name and Address of Reporting Person * DICKERSON GARY E				2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]							5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner					
(Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, 160 RIO ROBLES				3. Date of Earliest Transaction (Month/Day/Year) 01/27/2004							X_ Officer (give		Other dent and COO	er (specify below	v)	
(Street) SAN JOSE, CA 95130				4. If Amendment, Date Original Filed(Month/Day/Year)							6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person _ Form filed by More than One Reporting Person					
(City	y)	(State)	(Zip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned												
1.Title of So (Instr. 3)	ecurity	y 2. Transaction Date (Month/Day/Ye:			Date, if	(Instr. 8)		(.	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			Transaction(s) Fo		Ownership Form:	Beneficial	
				(Month/Day/Year)		Code V		V A	Amount	(A) or (D)	Price	(Instr. 3 and 4)			Direct (D) or Indirect (I) (Instr. 4)	Ownership (Instr. 4)
Common	Stock											5,949			D	
Reminder: I	Report on a se	eparate line for each	class of securities be	neficially ow	ned direc	ctly or i	Per in t	son his f	form ar	e not re	quire	ne collection of d to respond u rol number.				1474 (9-02)
			Table II	- Derivative (e.g., puts, o								Owned				
	2. Conversion or Exercise	3. Transaction 3A. Deemed 4. 5. Number 6. Date Exerc				ate	nd		le and Amount iderlying		9. Number of Derivative Securities		11. Nath			

Derivative Security	2. Conversion or Exercise Price of Derivative Security		3A. Deemed Execution Date, if any (Month/Day/Year)	Transaction Code (Instr. 8)		5. Number of Deriva Securitie Acquired or Disposof (D) (Instr. 3, and 5)	ntive s l (A) sed	Expiration Date (Month/Day/Y	Ionth/Day/Year) Securities (Instr. 3 and 4) Security (Instr. 5) Benefi Owne Follow Repor Transa		Derivative Securities Beneficially Owned Following Reported Transaction(s)	Ownership Form of Derivative Security: Direct (D) or Indirect n(s) (I)	11. Nature of Indirect Beneficial Ownership (Instr. 4)		
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		(Instr. 4)	(Instr. 4)	
Non- Qualified Stock Option (right to buy)	\$ 58.10	01/27/2004		A		25,000		10/27/2004	01/27/2014	Common Stock	25,000	\$ 0	25,000	D	
Non- Qualified Stock Option (right to buy)	\$ 16.97							10/23/1999	10/23/2008	Common Stock	22,365		22,365	D	
Non- Qualified Stock Option (right to buy)	\$ 26.25							11/10/2001	11/10/2010	Common Stock	32,500		32,500	D	
Non- Qualified Stock Option (right to buy)	\$ 29.31							10/02/2002	10/02/2011	Common Stock	105,000		105,000	D	

Non- Qualified Stock Option (right to buy)	\$ 32.75			04/04/2002	04/04/2011	Common Stock	32,500	32,500	D	
Non- Qualified Stock Option (right to buy)	\$ 33.75			10/27/2000	10/27/2009	Common Stock	100,000	100,000	D	
Non- Qualified Stock Option (right to buy)	\$ 34.67			11/08/2003	01/28/2013	Common Stock	50,000	50,000	D	
Non- Qualified Stock Option (right to buy)	\$ 37.05			11/08/2003	11/08/2012	Common Stock	25,000	25,000	D	
Non- Qualified Stock Option (right to buy)	\$ 40.14			05/22/2004	05/22/2013	Common Stock	1,000	1,000	D	
Non- Qualified Stock Option (right to buy)	\$ 44.6875			08/13/2000	08/11/2010	Common Stock	23,415	23,415	D	
Non- Qualified Stock Option (right to buy)	\$ 44.6875			08/13/2001	08/13/2010	Common Stock	41,585	41,585	D	
Non- Qualified Stock Option (right to buy)	\$ 51.229			11/08/2003	07/30/2013	Common Stock	25,000	25,000	D	
Non- Qualified Stock Option (right to buy)	\$ 53.86			10/27/2004	10/27/2013	Common Stock	50,000	50,000	D	

Reporting Owners

	Relationships						
Reporting Owner Name / Address	Director	10% Owner	Officer	Other			
DICKERSON GARY E C/O KLA-TENCOR CORPORATION 160 RIO ROBLES SAN JOSE, CA 95130			President and COO				

Signatures

By: Stuart J. Nichols For: Gary E. Dickerson	01/28/2004

Signature of Reporting Person	Date		

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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