

OMB APPROVAL	
OMB Number:	3235-0104
Estimated average burden hours per response:	0.5

**INITIAL STATEMENT OF 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

1. Name and Address of Reporting Person* <u>Titinger Jorge</u>  (Last) (First) (Middle) C/O KLA-TENCOR CORPORATION 160 RIO ROBLES  (Street) SAN JOSE CA 95130  (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 12/21/2006	3. Issuer Name and Ticker or Trading Symbol <u>KLA TENCOR CORP [ KLAC ]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>SVP, Chief Admin. Officer</u>	5. If Amendment, Date of Original Filed (Month/Day/Year)  6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Beneficially Owned**

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Stock-Restricted Stock Units	37,600	D	

**Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date				
Non-Qualified Stock Option (right to buy)	01/28/2004	01/28/2013	Common Stock 35,000	34.67	D	
Non-Qualified Stock Option (right to buy)	09/16/2006	09/16/2014	Common Stock 19,500	39.34	D	
Non-Qualified Stock Option (right to buy)	10/27/2004	08/02/2014	Common Stock 1,200	40.66	D	
Non-Qualified Stock Option (right to buy)	10/27/2004	04/26/2014	Common Stock 2,000	45.16	D	
Non-Qualified Stock Option (right to buy)	09/26/2006	09/26/2012	Common Stock 17,000	47.95	D	
Non-Qualified Stock Option (right to buy)	10/27/2004	10/27/2013	Common Stock 3,200	53.86	D	
Non-Qualified Stock Option (right to buy)	10/27/2004	01/27/2014	Common Stock 1,600	58.1	D	

**Explanation of Responses:**

By: Jeffrey Hall For: Jorge Titinger 01/05/2007

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 5 (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.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.