

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

OMB APPR	OVAL		
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Estimated average burden			
nours per response	e 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

(Print or Type Responses)							
Name and Address of Reporting Person * 2. Date of Event F Statement (Month				and Ticker or Trading Symbol DR CORP [KLAC]			
(Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE TECHNOLOC DRIVE	11/03/2010 Y		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) _X_Director		Filed(Mon	o 5. If Amendment, Date Original Filed(Month/Day/Year)	
(Street) MILPITAS, CA 95035			below)	below)	Applicable l _X_ Form fi	lual or Joint/Group Filing(Check Line) iled by One Reporting Person led by More than One Reporting Person	
(City) (State) (Zip)		Table I - Non-Derivative Securities Beneficially Owned					
1. Title of Security (Instr. 4)		2. Amount of Beneficially C (Instr. 4)	Owned		4. Nature of Indire (Instr. 5)	cct Beneficial Ownership	
Reminder: Report on a separate line for each class Persons who respondes the form discrete the form d	ond to the collect splays a currently	ion of informa valid OMB co	tion contained in tontrol number.		·		
1. Title of Derivative Security (Instr. 4) 2. Date Exerci and Expiration (Month/Day/Year)		Exercisable 3. Title and Amorration Date Securities Underl		4. Conversion or Exercise Price of Derivative	5. Ownership Form of Derivative Security: Direct	6. Nature of Indirect Beneficial Ownership (Instr. 5)	
	Date Expira Exercisable Date	Title Amo	ount or Number of	Security	(D) or Indirect (I) (Instr. 5)		
Reporting Owners							
Reporting Owner Name / Address	Relation	nships					

	Relationships			
Reporting Owner Name / Address	Director	10% Owner	Officer	Other
Higashi Emiko C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035	X			

Signatures

Brian M. Martin as Attorney-in-Fact for Emiko Higashi		11/04/2010
**Signature of Reporting Person		Date

Explanation of Responses:

No securities are beneficially owned

- * 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).

Remarks:

No securities are beneficially owned.

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

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number of the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number of the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number of the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number of the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number of the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number of the collection of the coll	ber.

Exhibit 24.1

Limited Power of Attorney - Securities Law Compliance

This statement confirms that the undersigned, as a director (and, as of the date hereof, as a nominee for director) of KLA-Tencor Corporation (the "Corporation"), hereby appoints Brian Martin (in 1. complete and execute Forms ID, 3, 4 and 5 and other forms (including any amendments thereto) as such attorney-in-fact shall in his discretion determine to be required or advisable pursuant to 2. to do all acts necessary in order to file such forms with the SEC, or any securities exchange or national association, that the Corporation and such other person or agency as the attorney-in-fact undersigned hereby ratifies and confirms all that said attorneys-in-fact and agents shall do or cause to be done by virtue hereof. The undersigned acknowledges that the foregoing attorneys-in This Limited Power of Attorney is executed at San Mateo, California as of the date set forth below.

Signature: /s/ Emiko Higashi Print Name: Emiko Higashi Dated: October 18, 2010

Witness:

Signature: /s/ William R. Daniels Print Name: William R. Daniels Dated: October 18, 2010