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

FORM 8-K

**CURRENT REPORT
Pursuant To Section 13 or 15(d) of
The Securities Exchange Act of 1934**

Date of report (Date of earliest event reported): March 15, 2007

KLA-TENCOR CORPORATION

(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction of Incorporation)

000-09992
(Commission File Number)

04-2564110
(IRS Employer Identification No.)

**160 Rio Robles
San Jose, California 95134**
(Address of Principal Executive Offices)

Registrant's telephone number, including area code: (408) 875-3000

N/A
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 8.01. Other Events.

As a result of the Special Committee investigation of the Company's historical stock option practices, in the fall of 2006, the Board of Directors suspended use of any type of stock option committee (including a stock option committee composed of one or more executives) and delegated sole authority for granting stock options and restricted stock awards to the full Compensation Committee, subject to ratification by the Board of Directors, with the grant date being the date of the Compensation Committee approval and with the option exercise price or restricted stock valuation price equal to the closing market price on the grant date. The Board of Directors may in the future evaluate the possibility of again using a stock option committee, and, if so, the Company will implement additional controls designed to assure that the stock option committee is properly constituted and acts within the scope of its delegated authority.

In February 2007, the Compensation Committee approved, and the Board of Directors ratified, a new policy regarding equity award grant procedures. The new policy incorporates the following elements (many of which were existing practices):

- Annual reviews by the Compensation Committee of equity award dilution targets and overall equity plan design.
- Quarterly approvals of equity awards by the Compensation Committee, at regularly scheduled meetings, including annual focal awards, employee new-hire and promotion awards, and ongoing special program awards; quarterly meetings are usually scheduled in August, November, February and May.
- In non-routine circumstances such as the hiring of a senior executive, approvals of equity awards by the Compensation Committee at special meetings or, when a special meeting is not feasible, by unanimous written consent; otherwise, no equity awards will be approved by unanimous written consent.
- Clarification and enhancement of the administrative process for issuing equity awards to assure that (a) the grant date of each award is the date of Compensation Committee approval, (b) the exercise or valuation price of each award is the closing market price on the date of grant, (c) notifications of the awards are promptly sent to the recipients, and (d) the awards are promptly entered into the Company's equity award database and financial records.
- Annual reconciliations and reports regarding equity awards to allow the Compensation Committee to verify compliance with this policy; these reviews will usually occur at the August meeting.

The information in this Form 8-K shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities under that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, regardless of any general incorporation language in such filing.

SIGNATURES

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

Date: March 15, 2007

KLA-TENCOR CORPORATION

By: /s/ Jeffrey L. Hall
Name: Jeffrey L. Hall
Title: Chief Financial Officer