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): May 22, 2006

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

 $$\mathrm{N}/\mathrm{A}$$ (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))

Item 8.01 Other Events.

KLA-Tencor Corporation announced today that its Board of Directors has appointed a Special Committee of independent directors to conduct an internal investigation relating to past stock option grants, the timing of such grants and related accounting and documentation. The Special Committee will be assisted by outside legal counsel and accounting experts. KLA-Tencor also said that it has received subpoenas from the U.S. Attorney's Offices for the Eastern District of New York and Northern District of California requesting information relating to its past stock option grants. KLA-Tencor said that it will cooperate fully with any government or regulatory investigation into these matters. KLA-Tencor further disclosed that on May 22, 2006, it was served with a complaint relating to a lawsuit filed in the United States District Court for the Northern District of California filed by the Theodore R. Kornreich Revocable Trust, derivatively on behalf of KLA-Tencor.

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.

KLA-TENCOR CORPORATION

Date: May 24, 2006 By: /s/ Stuart J. Nichols

Name: Stuart J. Nichols

Title: Vice President and General Counsel