UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 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): August 3, 2006

KLA-TENCOR CORPORATION

(Exact name of registrant as specified in its charter)

DELAWARE 000-09992 04-2564110 (State or other jurisdiction of (Commission File Number) (IRS Employer incorporation) Identification No.) 160 Rio Robles San Jose, California 95134 (Address of principal executive offices, including zip code) (408) 875-3000 (Registrant's telephone number, including area code) 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))

Item 8.01 Other Events

On August 3, 2006, the Board of Directors of KLA-Tencor Corporation (the "Company") adopted a majority stockholder vote standard for uncontested director elections. Under this new majority vote standard, which replaces plurality voting for uncontested director elections, a nominee must receive favorable votes from holders of a majority of the shares represented at the meeting and entitled to vote in order to be elected to the Board of Directors. In contested elections where the number of nominees exceeds the number of directors to be elected, the vote standard will continue to be a plurality of votes cast.

In addition, if an incumbent director nominee is not elected, the director shall tender his or her resignation to the Board of Directors immediately upon certification of the election results. The Nominating and Governance Committee will make a recommendation to the Board on whether to accept or reject the resignation. The Board will act on the Committee's recommendation within 180 days from the date of the certification of the election results and will publicly disclose its decision. The director who tenders his or her resignation will not participate in the Board's decision.

SIGNATURES

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

KLA-TENCOR CORPORATION

By: /s/ Stuart J. Nichols

Stuart J. Nichols Vice President & General Counsel

Date: August 7, 2006