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): 05/30/2008

KLA-TENCOR CORPORATION

(Exact name of registrant as specified in its charter)

Commission File Number: 000-09992

Delaware

(State or other jurisdiction of incorporation)

04-2564110 (IRS Employer Identification No.)

One Technology Drive, Milpitas, California 95035 (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:

[] 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 2.01. Completion of Acquisition or Disposition of Assets

On May 30, 2008, KLA-Tencor Corporation ("KLA-Tencor") completed its purchase of the shares of ICOS Vision Systems Corporation NV (Euronext: IVIS) that had been submitted by shareholders in the initial acceptance period of KLA-Tencor's tender offer to purchase ICOS's outstanding securities. As previously announced, 10,250,802 shares of ICOS were tendered into the initial acceptance period, constituting 96.03% of the outstanding shares of ICOS. The purchase price for each tendered share of ICOS common stock was EUR 36.50 in cash, without interest, and the aggregate consideration paid by KLA-Tencor for the tendered shares was EUR 374,154,273.

As previously announced, because KLA-Tencor holds more than 95% of the shares of ICOS, it has reopened the takeover bid at the same terms to proceed with a squeeze-out in order to acquire all of the remaining ICOS shares and 2002 warrants (but not the 2007 options) which, as of that time, have not been tendered to the bid. Following the squeeze-out, KLA-Tencor expects to own 100% of the outstanding shares of ICOS. The bid price is EUR 36.50 for each share and EUR 32.76 for each 2002 warrant. The acceptance period for the squeeze-out bid, which began on May 28, 2008, is expected to expire on June 17, 2008 at 4 p.m. (Central European Time).

A copy of the news release issued by KLA-Tencor on June 1, 2008 announcing the finalization of its purchase of the shares of ICOS submitted into the initial acceptance period of the tender offer is filed herewith as Exhibit 99.1 and is incorporated herein by reference. References to any website in the release, including KLA-Tencor's website, do not incorporate by reference the information on any such website into this Current Report on Form 8-K, and KLA-Tencor disclaims any such incorporation by reference. In addition, references in the release to the prospectus relating to the tender offer do not incorporate by reference the information contained in such prospectus into this Current Report on Form 8-K, and KLA-Tencor disclaims any such incorporation by reference.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

The following exhibit is filed herewith:

Exhibit No. Description

99.1 Text of news release issued by KLA-Tencor Corporation dated June 1, 2008

Signature(s)

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

Date: June 02, 2008

By: /s/ Brian M. Martin

Brian M. Martin Senior Vice President and General Counsel

Exhibit Index

Exhibit No.	Description
EX-99.1	Text of news release issued by KLA-Tencor Corporation dated June 1, 2008

FOR IMMEDIATE RELEASE

Investor Relations: Ed Lockwood Sr. Director, Investor Relations (408) 875-9529 ed.lockwood@kla-tencor.com

Media Relations: Meggan Powers Sr. Director, Corporate Communications (408) 875-8733 meggan.powers@kla-tencor.com

KLA-Tencor Completes First Stage of Acquisition of ICOS Vision Systems; Purchases Over 96% of Outstanding Shares

SAN JOSE, Calif.-June 1, 2008-KLA-Tencor Corporation (NASDAQ: KLAC) today announced that it has finalized its purchase of the shares of ICOS Vision Systems Corporation NV (Euronext: IVIS) submitted by shareholders into the tender offer. As a result, effective May 30, 2008, KLA-Tencor owns over 96% of the outstanding shares of ICOS.

As previously announced, because KLA-Tencor (through its wholly owned subsidiary) holds more than 95% of the shares of ICOS, it has reopened the takeover bid at the same terms to proceed with a squeeze-out in order to acquire all of the remaining ICOS shares and 2002 warrants (but not the 2007 options) which, as of that time, have not been tendered to the bid. Following the squeeze-out, KLA-Tencor expects to own 100% of the outstanding shares of ICOS. The bid price is EUR 36.50 for each share and EUR 32.76 for each 2002 warrant. The acceptance period for the squeeze-out bid, which began on May 28, 2008, is expected to expire on June 17, 2008 at 4 p.m. (Central European Time).

Additional details regarding the offer and related acceptance procedures are set forth in the prospectus related to the offer. The prospectus is available in Belgium free of charge at the counters of KBC Securities, KBC Bank, CBC Banque or by phone +32 3 283 29 70 (KBC telecenter) or 0800/92020 (CBC Banque) and at Petercam. Electronic versions of the prospectus (including the acceptance form) are available on the following Web sites: www.kbcsecurities.be, www.kbc.be, www.cbcbanque.be, www.petercam.be and www.kla-tencor.com.

About KLA-Tencor: KLA-Tencor is the world leader in yield management and process control solutions for semiconductor manufacturing and related industries. Headquartered in San Jose, California, KLA-Tencor has sales and service offices around the world. An S&P 500 company, KLA-Tencor is traded on the NASDAQ Global Select Market under the symbol KLAC. Additional information about KLA-Tencor is available at http://www.kla-tencor.com (KLAC-F).

About ICOS: ICOS designs and manufactures inspection equipment for semiconductor packaging and interconnect applications. It is a world-leading supplier of equipment for the visual inspection of IC's, before they are used in various applications such as PC's, portable phones or cars. ICOS's systems perform two- and three-dimensional (2D and 3D) inspection of IC's, wafers, solar cells, substrates, sockets, etc. ICOS offers stand-alone inspection systems, as well as inspection modules for integration. ICOS is headquartered in Leuven, Belgium and has R&D centers in Belgium, Germany and Hong Kong, sales and support offices in Japan, the USA, Singapore, Hong Kong, Korea and Taiwan and production facilities in Belgium, Hong Kong and China. Additional information on ICOS is available at http://www.icos.be.

Disclaimer: With the exception of the CBFA, no other authority in any other jurisdiction has approved the prospectus (including any supplement thereto). This approval does not entail an assessment of the suitability or quality of the bid or the squeeze-out. The bid is made only in Belgium and the United States, and no steps have been or will be taken with a view to obtaining authorization to distribute the prospectus in countries other than Belgium and the United States.

Forward Looking Statements: Statements in this press release other than historical facts, such as statements regarding KLA-Tencor's expected ownership percentage of ICOS shares following the completion of the squeeze-out bid or the anticipated expiration date for the reopening of the bid, are forward-looking statements, and are subject to the Safe Harbor provisions created by the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on current information and expectations, and involve a number of risks and uncertainties. Actual results may differ materially from those projected in such statements due to various factors, including but not limited to those associated with delays relating to the documentation and procedures required in connection with the reopening of the bid or the completion of the squeeze-out, or other factors. For other factors that may cause actual results to differ materially from those projected and anticipated in forward-looking statements in this release, please refer to the Company's Annual Report on Form 10-K for the year ended June 30, 2007, subsequently filed Quarterly Reports on Form 10-Q and other filings with the Securities and Exchange Commission (including, but not limited to, the risk factors described therein).