

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
November 19, 2010**

**ORDER GRANTING CONFIDENTIAL TREATMENT
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

KLA-Tencor Corporation

File No. 000-9992 - CF#25866

KLA-Tencor Corporation submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from the Exhibits to a Form 10-Q filed on October 29, 2010.

Based on representations by KLA-Tencor Corporation that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibit(s) will not be released to the public for the time period(s) specified:

Exhibit 10.45 through October 27, 2011

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Craig E. Slivka
Special Counsel