



DIVISION OF
CORPORATION FINANCE

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

January 28, 2011

Via U.S. Mail and Facsimile

Sean B. O'Connor
Vice President, Chief Financial Officer, Secretary and Treasurer
LeCroy Corporation
700 Chestnut Ridge Road
Chestnut Ridge, NY 10977

Re: LeCroy Corporation
Form 10-K for the fiscal year ended July 3, 2010
Filed September 8, 2010
File No. 000-26634

Dear Mr. O'Connor:

We have reviewed your filing and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to this comment, we may have additional comments.

Item 11. Executive Compensation, page 100

1. We note from your discussion under "Executive Performance-Based Annual Incentive Plans" on page 21 of the proxy statement that you have incorporated by reference into your Form 10-K that you have not disclosed the specific targets to be achieved in order for your named executive officers to earn their respective annual cash-based incentive compensation under each of your three incentive plans. Please provide such disclosure in your future filings, as applicable. To the extent you believe that disclosure of such information, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. To the extent

that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. For guidance, refer also to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations available on our website at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>. In discussing how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that possesses a reasonable risk of competitive harm.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comment, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Gabriel Eckstein at (202) 551-3286 or Tim Buchmiller, reviewing attorney, at (202) 551-3635 with any questions.

Sincerely,

Amanda Ravitz
Assistant Director