



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

DIVISION OF  
CORPORATION FINANCE

June 15, 2010

Michael J. Celebrezze  
Senior Vice President of Finance,  
Chief Financial Officer and Treasurer  
LCA-Vision Inc.  
7480 Montgomery Road  
Cincinnati, OH 45236

**Re: LCA-Vision Inc.**  
**Form 10-K for the Fiscal Year Ended December 31, 2009**  
**Filed February 26, 2010**  
**File Number 000-24469**

**Definitive Proxy Statement**  
**Filed April 1, 2010**

Dear Mr. Celebrezze:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

Jeffrey Riedler  
Assistant Director