

Electro-Optical Sciences, Inc.
3 West Main Street, Suite 201
Irvington, NY 10533

August 8, 2005

VIA EDGAR AND FACSIMILE

Ms. Peggy A. Fisher
Division of Corporate Finance
Securities & Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Re: Electro-Optical Sciences, Inc. Registration Statement on Form S-1
(File No. 333-125517) (the "Registration Statement")

Dear Ms. Fisher:

In connection with the request of Electro-Optical Sciences, Inc. (the "Company") to have the effective date of the above referenced Registration Statement accelerated so that it will become effective at 4:30 p.m. on August 9, 2005, or as soon thereafter as practicable, the Company acknowledges that:

- (a) should the Securities and Exchange Commission (the "Commission") or the staff, acting, pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- (b) the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- (c) the Company may not assert the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Very truly yours,

ELECTRO-OPTICAL SCIENCES, INC.

By: /s/ Joseph V. Gulfo

Joseph V. Gulfo
President and Chief Executive Officer