



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

April 16, 2009

Helene Simonet
Executive Vice President and Chief Financial Officer
Coherent, Inc.
5100 Patrick Henry Drive
Santa Clara, CA 95054

Re: Coherent, Inc.
Form 10-K for the Fiscal Year Ended September 27, 2008
Filed November 25, 2008
File No. 001-33962

Dear Ms. Simonet:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

Sincerely,

Martin James
Senior Assistant Chief Accountant