



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

Mail Stop 4631

July 28, 2009

By U.S. Mail and Facsimile

Mr. Jess A. Jankowski
Chief Financial Officer
Nanophase Technologies Corporation
1319 Marquette Drive
Romeoville, Illinois 60446

Re: Nanophase Technologies Corporation
Form 10-K for the Fiscal Year Ended December 31, 2008
Form 10-K/A for the Fiscal Year Ended December 31, 2008
Form 10-Q for the Fiscal Quarter Ended March 31, 2009
File No. 000-22333

Dear Mr. Jankowski:

We have reviewed your response letter dated June 25, 2009 and have the following additional comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. After reviewing this information, we may or may not raise additional comments.

General

1. We remind you to file your amended Forms 10-K and 10-Q, as applicable, as requested in prior comments three, four and seven.

Form 10-K/A for the Fiscal Year Ended December 31, 2008

Financial Statements, page F-2

Note 2 – Summary of Significant Accounting Policies, Change in Accounting Method, page F-7

2. We note your response to prior comment five; however, it does not appear that you were fully responsive to our comment. In this regard, please also explain to us when and how you previously evaluated patents for impairment, including the date of your most recent impairment analysis, and the significant assumptions underlying your analysis.

Note 4 – Investments, page F-16

3. We note your response to prior comment six; however, it does not appear that your proposed disclosures are entirely responsive. In this regard, we remind you to revise future filings to:
 - quantify the variable coupon rates, weighted average interest rates, or ranges of interest rates for the auction rate securities;
 - disclose the key assumptions underlying the valuation of the auction rate securities; and
 - provide all disclosures required by paragraphs 19-22 of SFAS 115, as applicable, for all other investments.
4. Please confirm to us that you intend to provide both the additional information in the narrative portion of your response as well as the summary of additional information in future filings.
5. In your proposed disclosures, you indicate that the fair values of the auction rate securities were determined by an independent appraisal firm. Please be advised that if you rely on an independent appraisal firm, you should identify them and, when applicable, provide their consent, otherwise you should do not imply that you are relying on an independent party.

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Please respond to these comments within 10 business days, or tell us when you will provide us with a response. Please provide us with a response letter that keys your response to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please furnish your response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

If you have any questions regarding these comments, you may contact Dale Welcome, Staff Accountant, at (202) 551-3865, Anne McConnell, Senior Staff Accountant, at (202) 551-3709 or, in their absence, to the undersigned at (202) 551-3768.

Sincerely,

John Cash
Accounting Branch Chief