

Via Facsimile and U.S. Mail
Mail Stop 6010

March 19, 2009

David F. Hoffmeister
Chief Financial Officer
Life Technologies Corporation
5791 Van Allen Way
Carlsbad, CA 92008

Re: Life Technologies Corporation
Form 10-K for the Fiscal Year Ended December 31, 2008
Filed March 2, 2009
File Number: 000-25317

Dear Mr. Hoffmeister:

We have reviewed your filing and have the following comments. We have limited our review to your financial statements and related disclosures and do not intend to expand our review to other portions of your document. In our comments, we ask you to provide us with information to better understand your disclosures. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Notes to Consolidated Financial Statements

Note 1 – Business Activity, Summary of Significant Accounting Policies and Significant Accounts

Other Intangible Assets, page 71

1. Please tell us why you believe that the straight-line method of amortization is more appropriate than an accelerated method of amortization for the customer relationship intangible asset given that customer relationships frequently have a

higher rate of attrition in earlier periods with the rate of attrition declining over time. In addition, please tell us if you maintain records and controls to compare the actual and estimated attrition for each material customer group throughout its economic life, and whether you revise accounting estimates on a timely basis when adverse trends develop.

Note 7 – Income Taxes, Page 92

2. Your foreign operations accounted for 56%, 53% and 46% of your revenues and 99%, 51% and 75% of your pre-tax income in 2008, 2007 and 2006. Under Risk Factors on page 14 you disclose that your “future growth depends in part on your ability to acquire new products, services, and technologies through additional acquisitions, which may absorb significant resources and may not be successful.” Under Risk Factors on page 20 you also disclose that the majority of your expenses are incurred in U.S. dollars that include increasing amounts of research and development expenses. In addition, you incurred significant financial leverage denominated in U.S. dollars as a result of the merger with Applied Biosystems.

You disclose that taxes on approximately \$257.5 million of other undistributed earnings of foreign subsidiaries have not been provided for at December 31, 2008 as these earnings are considered to be permanently invested in the operations of such subsidiaries. Please disclose the factors management considered in concluding that there is sufficient evidence that the foreign subsidiaries have invested or will invest the undistributed earnings indefinitely given the items referenced above. Please also disclose specific plans for the reinvestment of the undistributed earnings. Refer to paragraph 12 of APB 23.

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Please provide us the information requested within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your response to our comments. Detailed cover letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

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- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Staci Shannon, Staff Accountant, at (202) 551-3374 or Gus Rodriguez, Accounting Branch Chief, at (202) 551-3752 if you have any questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant