April 10, 2007

VIA U.S. MAIL AND FACSIMILE

Mr. Peter T. F. M. Wennink Chief Financial Officer ASML Holdings N.V. De Run 6501 5504 DR Veldhoven The Netherlands

RE: ASML Holdings N.V.

Form 20-F for the fiscal year ended December 31, 2006

Filed January 26, 2007 File No. 000-25566

Dear Mr. Wennink:

We have reviewed your filing and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Mr. Wennink ASML Holding N.V. April 10, 2007 Page 2

Form 20-F for the fiscal year ended December 31, 2006

<u>Item 5. Operating and Financial Review Prospects</u>

A. Operating Results, page 23

Critical Accounting Policies Using Significant Estimates, page 23

Share-based compensation expenses, page 26

1. We see that during fiscal year 2006 you began using the implied volatility of your publicly traded stock options to estimate the stock price volatility. We note that the volatility used in the Black Scholes valuation method decreased from 65.6% in 2005 to 30% in 2006 as a result of this change. Please tell us how you determined that implied volatility is more reflective of market conditions and a better indicator of expected volatility. Your explanation should include (a) why you changed your method of determining estimated volatility and (b) why you now only use implied volatility and not a combination of historical and implied volatility. Your response should also include your evaluation of the factors listed in Questions 3 and 4 of SAB Topic 14.D.1. In future filings, provide the disclosures in Question 5 of SAB Topic 14.D.1 including a summary of your evaluation of the factors listed in Questions 2 and 3. We also refer you to SEC Release No. FR-60 and Section V, "Critical Accounting Estimates," in SEC Release No. FR-72.

Item 15. Controls and Procedures, page 54

2. It does not appear that your certifying officers have reached a conclusion that your disclosure controls and procedures are *effective*. Please confirm to us that, based on the evaluation of the effectiveness of disclosure controls and procedures performed by management of ASML, you have concluded that your disclosure controls and procedures are effective. Please revise future filings to appropriately address your officers' conclusions regarding the effectiveness of your disclosure controls and procedures. Refer to Exchange Act Rule 13a-15(e).

Mr. Wennink ASML Holding N.V. April 10, 2007 Page 3

Consolidated Financial Statements

Note 13. Employee Benefits, page F-24

Stock Option Extension Plans and Financing, page F-27

3. We see that for options issued prior to 2001, you offered a virtual financing arrangement whereby you loaned the tax value of the options granted to employees and management under interest free loans which are either repaid upon exercise of the options or forgiven if the options are not exercised. We also note that in 2006 you issued options that will become effective only after options issued in 2000 expire and that the virtual employee loan feature will be transferred to the new option, creating a perpetual loan. Please tell us how you are accounting for the options issued prior to 2001 as well as the options issued in 2006. Please reference the accounting literature in APB Opinion No. 25, FIN 44, EITF 95-16, EITF 00-23 and SFAS 123-R, as appropriate, to substantiate the accounting treatment.

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

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 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 writing, a statement from the company acknowledging that:

- 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.

Mr. Wennink ASML Holding N.V. April 10, 2007 Page 4

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 Kristin Lochhead at (202) 551-3664 or me at (202) 551-3676 if you have questions. In this regard, please do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671 with any other questions.

Sincerely,

Brian Cascio Accounting Branch Chief