

Mail Stop 3720

December 21, 2006

Mr. James P. Santelli  
Chief Financial Officer  
Digital Angel Corporation  
490 Villaume Avenue  
South Saint Paul, Minnesota 55075

**Re: Digital Angel Corporation  
Form 10-K for Fiscal Year Ended December 31, 2005  
Filed March 8, 2006**

**Form 10-K/A for Fiscal Year Ended December 31, 2005  
Filed April 6, 2006  
File No. 1-15177**

Dear Mr. Santelli:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise your documents 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 or may not 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.

Form 10-K/A for Fiscal Year Ended December 31, 2005

Item 9A. Controls and Procedures, page 12

Change in Internal Control Over Financial Reporting, page 12

1. We note your disclosure that your management's assessment of the effectiveness of your internal control over financial reporting as of December 31, 2005 has been audited by Eisner LLP. In addition, the report of Eisner on page 12 refers to the "accompanying Management's Report on Internal Controls over Financial Reporting." Based on these references, it appears that management's report should have been included in the Form 10-K. Please either amend to include Management's Report on Internal Controls over Financial Reporting, or tell us why you believe it is not necessary to include this report.

Financial Statements

Note 2. Acquisitions, page 28

2. Based on your disclosure in Note 11 at page 33, it appears that you determined the value of the stock issued to Applied Digital in exchange for shares of their common stock using the stock prices for the ten trading days immediately preceding, and not including, the transaction closing date. You determined that the value of the stock was \$3.5 million, which was the basis for determining your purchase price for your acquisition of DSD Holdings A/S. Your methodology for determining the purchase price does not appear to be in accordance with paragraph 22 of SFAS 141, which requires the use of the market price for a reasonable period before and after the date that the terms of the acquisition are agreed to and announced to determine the fair value of securities issued. Please tell us your basis in the accounting literature for your policy and how you considered the guidance in paragraph 22.

Form 10-K for Fiscal Year Ended December 31, 2005

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 14

Critical Accounting Policies and Estimates, page 15

Goodwill, Intangibles and Other Long-Lived Assets, page 15

3. We note that you engaged an independent valuation firm to review and evaluate the goodwill of your various reporting units. While you are not required to make

reference to a third party valuation specialist, when you do you should also disclose the name of the expert and confirm to us in your response letter that the expert is aware of being named in the filing. If you decide to delete your reference to the third party expert, you should revise to provide disclosures that explain the method and assumptions used by management to determine the valuation. Please revise to comply with this comment in future filings.

\* \* \* \*

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please submit your response letter on EDGAR. Please understand that we may have additional comments after reviewing your amendment and 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 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 writing, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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.

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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 filings or in response to our comments on your filings.

You may contact Melissa Hauber, Senior Staff Accountant, at (202) 551-3368 or Carlos Pacho, Senior Assistant Chief Accountant, at (202) 551-3835 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spiegel  
Assistant Director