

February 1, 2006

Mr. Joseph R. Chinnici
Senior Vice President and Chief Financial Officer
Ciena Corporation
1201 Winterson Road
Linthicum, MD 21090-2205

Re: Ciena Corporation
Form 10-K for Fiscal Year Ended October 31, 2005
Filed January 12, 2006

File No. 0-21969

Dear Mr. Chinnici:

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. Please address the following comments in future filings. If you disagree, we will consider your explanation as to why our comment is inapplicable or a future 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 on 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 for the Fiscal Year ended October 31, 2005

Item 5. Market for Registrant's Common Stock and Related Stockholder Matters, page 22

1. We note in footnote 1 of your tabular presentation that you are granted the right to repurchase the shares issued, to the extent that the option or restricted stock is not vested, at the grantee's exercise price. Tell us in detail the specific terms of this repurchase feature, and your consideration of whether the repurchase of the options or restricted stock at the grantee's exercise price would trigger variable accounting. Please cite the appropriate accounting literature in your response.

Note 4. Goodwill and Long-Lived Asset Impairments, page 59

2. Addressing paragraph 30 of SFAS 142 and EITF D-101, tell us how you determined that your operating segments and reporting units are the same.

3. We note the footnote to your tabular presentation for goodwill. Tell us why the aggregation of your CNG and MESH operating/reportable segments to form the TSG reportable segment was appropriate under the guidance of SFAS No. 131. We note from your segment footnote that the TSG segment represents a significant portion of your total revenue and total segment loss for 2005.

4. Further, tell us why you believe it is appropriate to combine

the
CNG and MESH reporting units to form the TSG reporting unit for
your
impairment testing. Refer to your basis in the accounting
literature.

5. We note that you utilized an independent valuation expert to
assess the fair value of your reporting units and their intangible
assets. While you are not required to make reference to this
independent valuation, when you do you should also disclose the
name
of the expert and include the consents of the expert. If you
decide
to delete your reference to the independent valuation, you should
revise to provide disclosures that explain the method and
assumptions
used by management to determine the valuation. Revise to comply
with
this comment in future filings.

6. We note in 2005 and 2004 the fair value of your reporting units
was determined using the average of the outcomes from all or some
of
the following valuation methods: market multiples; comparable
transactions; and discounted cash flows. Tell us why you believe
a
fair value measurement technique that averages the outcomes of
various methodologies is appropriate. Specifically refer to
paragraphs 23-25 of SFAS 142 in your response.

7. We also note a control premium of 15 - 20% was added to the
valuation results for each reporting unit. Tell us why you
believe
it is appropriate to include a control premium for each reporting
unit considering that each reporting unit does not have publicly
traded equity securities.

8. We note in 2005 the fair value of your reporting units was
determined using the average of the valuations calculated using
market multiples and discounted cash flows, with no control
premium.
Tell us why it is appropriate, citing specific guidance under SFAS
142, to change your valuation methodologies from year to year.

Note 6. Accounts Receivable, page 62

9. We note your allowance for doubtful accounts in the amount of
\$3.3
million includes a specific provision for one customer in the
amount
of \$2.6 million. Tell us why you believe the net balance of \$0.7
million is an appropriate allowance for your \$73 million in
accounts
receivable at October 31, 2005. Further, in future filings,
disclose
here and in your critical accounting policies the estimates
management has made in determining the appropriate balance for
your
allowance for doubtful accounts.

Note 16. Commitments and Contingencies, page 71

10. We note on August 31, 2005 that the district court issued a
preliminary order approving the stipulated settlement agreement.
Tell us the amount of that settlement and if you have it recorded
as
a liability for the fiscal year ended October 31, 2005.

Note 17. Segment Reporting, 72

11. We note your recent acquisitions of Catena and Akara were
headquartered in Canada. Tell us if the revenue generated from
these
acquisitions is material and your consideration of paragraph 38 of
SFAS No. 131.

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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 furnish
a

letter that keys your responses to our comments and provides any requested information. Detail letters greatly facilitate our review.

Please file your response letter via EDGAR. 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 filings 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.

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 Bob Carroll, Staff Accountant, at (202) 551-3362 or Kyle Moffatt, Branch Chief Accountant, at (202) 551-3836 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,

/s/ Kyle Moffatt for

Larry Spirgel
Assistant Director

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Mr. Joseph R. Chinnici, Chief Financial Officer
Ciena Corporation
February 1, 2006
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

