

Room 4561

September 15, 2006

Richard Deranleau
Chief Financial Officer
Brocade Communications Systems, Inc.
1745 Technology Drive
San Jose, CA 95110

Re: Brocade Communications Systems, Inc.
Form 10-K for the fiscal year ended October 29, 2005
Filed January 19, 2006
Forms 8-K
Filed on May 18, 2006 and August 17, 2006
File No. 000-25601

Dear Mr. Deranleau:

We have reviewed the above referenced filings and have the following comments. Please note that we have limited our review to the matters addressed in the comments below. We may ask you to provide us with supplemental information so we may better understand your disclosures. Please be as detailed as necessary in your explanations. 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 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 filed on January 19, 2006

Consolidated Statements of Operations-page 46

1. The net revenues and cost of revenues are presented in the consolidated statements of operating product and services. Please explain why your presentation does not present the product and service components of net revenue and cost of revenue on a disaggregated basis in accordance with Rule 5-03(b) of Regulation S-X.
2. When presenting disaggregated product and service revenues in your Consolidated Statements of Operations the presentation should be consistent with GAAP. In this regard, for your multiple-element software arrangements accounted for under SOP 97-2 you would be "limited to the use of VSOE" of fair value as determined by the appropriate

GAAP, for the purposes of allocating arrangement consideration among deliverables in your Consolidated Statements of Operations. This may require your presentation to include separate revenue, and related cost of revenue, line items for bundled arrangements that are not separable, because of the absence of VSOE for any undelivered PCS element. You should also include a footnote description to inform investors of the nature of the additional line item.

Note 2. Summary of Significant Accounting Policies

Investments and Equity Securities-page 50

3. We note from the disclosures that you have revised the October 30, 2004 balance sheet to reclassify \$35.2 million of auction rate securities from cash and cash equivalents to short term investments. Revise your disclosures to also discuss the impact on the consolidated statements of cash flows, cash flows from investing activities and MD&A as applicable.
4. Confirm to us that the reclassification is reflected on the balance sheets and statements of cash flows for all periods presented. Explain how management assessed the need to provide disclosures related to this reclassification under Item 307 of Regulation S-K disclosure controls and procedures and Item 308(c) of Regulation S-K changes in internal controls over financial reporting.
5. Tell us how you determined the current/non-current balance sheet classification of the securities under paragraph 17 of SFAS 115 and Chap. 3A of ARB No. 43. Tell us how you considered footnote disclosures to explain the basis for the current/non-current classification as well as the reason why reclassification was made to comply with SFAS 95.

Revenue Recognition-page 53

6. Describe for us the accounting revenue recognition principles and methods of applying them for each of your product and service offerings disclosed under Item 1 Business, on pages 3 to 5. For example, we note from your disclosures on page 5 of the filing that you offer a range of professional services to facilitate customer projects, to assist customers in the design, implementation, and operation of their SAN. Describe the nature of these services. Tell us how you recognize revenue for each of these services, the related authoritative guidance and whether you have entered into any fixed price contracts for these services. Please tell us how your revenue policy disclosures appropriately address the nature of and accounting policy for deferred revenue associated with product sales and/or services.
7. For your multiple-element arrangements you have disclosed that software products are essential to the functionality of your hardware products and so are accounted for under SOP 97-2. For products or services not sold within multiple-element arrangements tell us

why they are not software related and accounted for pursuant to SOP 97-2 and EITF Issue 03-05.

8. You disclose within your multiple-element arrangement footnote that you apply the residual method of paragraph 12 of SOP 97-2 "if VSOE is not available." Since application of the residual method requires VSOE for undelivered elements please explain how you can apply the residual method in the absence of VSOE.

Stock Based Compensation-page 54

9. Tell us what consideration you gave to providing amended paragraph 45 of SFAS 123 disclosures for the financial statement periods affected by the restatement but which you did not file amendments.

Note 5. Lease Termination Charge and Other, net-page 60

10. We note from the disclosure that you recorded a \$76.8 million lease termination fee in connection with the building purchase at your San Jose, California headquarters. We further note that this entire amount was expensed during the fiscal year ended October 30, 2004. Tell us how you considered any future economic benefit associated with the fee to the Company and whether the lease termination fee should be capitalized and allocated over future periods. Cite the authoritative literature you relied upon in your determination to immediately expense the lease termination fee. Tell us what other accounting literature you considered in accounting for the fee.

Item 9A. Controls and Procedures-page 77

11. We note your disclosure that a control system, no matter how well conceived, "can provide only reasonable, not absolute, assurance that the objectives of the control system will be met." Please confirm, if true, the conclusions of management that the disclosure controls and procedures are effective at the "reasonable assurance" level. Refer to SEC Release No. 33-8238.

Forms 8-K filed on May 18, 2006 and August 17, 2006

12. We believe the non-GAAP statements of operations appearing in your Forms 8-K filed May 18, 2006 and August 17, 2006 may create the unwarranted impression to investors that the non-GAAP statements of operations have been prepared under a comprehensive set of accounting rules or principles while also conveying undue prominence to a statement based on non-GAAP measures. In addition, Section II.A.2 of SEC Release 33-8176 defines non-GAAP measures and does not contemplate including non-GAAP financial statements as a "measure." Please remove these presentations, or explain to us in reasonable detail why retention of these tables is justified in light of our concerns. As a substitute for this presentation format, you may consider presenting only individual non-GAAP measures (i.e., line items, subtotals, etc.) provided that each one complies

with Item 10 of Regulation S-K and Question 8 of the Division of Corporate Finance's Frequently Asked Questions Regarding Use of Non-GAAP Financial Measures. Refer also to SAB Topic 14G.

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As appropriate, please amend your filing and respond to these comments within ten business days or tell us when you will provide us with a response. Please submit all correspondence and supplemental materials on EDGAR as required by Rule 101 of Regulation S-T. You may wish to provide us with marked copies of any amendment to expedite our review. Please furnish a cover letter with any amendment 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 any amendment and your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain 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.

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 connection with our review of your filing or in response to our comments on your filing.

If you have any questions, please call Morgan Youngwood at (202) 551-3479 or myself at (202) 551-3730.

Sincerely,

Craig Wilson,
Senior Assistant Chief Accountant