

Room 4561

November 15, 2006

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

Re: Brocade Communications Systems, Inc.
Forms 8-K
Filed on May 18, 2006 and August 17, 2006
File No. 000-25601

Dear Mr. Deranleau:

We have reviewed your response letter dated September 25, 2006, and have the following comment.

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.

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

1. We note your response to prior comment No. 11 of our letter dated September 15, 2006. As previously indicated, 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. We further note that your use of non-GAAP financial measures excludes a number of recurring items. For instance, your non-GAAP financial measures include adjustments for certain gains on the disposition of marketable or equity investments, amortization of intangible assets, in-process research and development expense, and costs associated with ongoing SEC investigations and other related costs. Demonstrate the usefulness of each non-GAAP measure in assessing performance when these recurring items are a result of your operations and have contributed to your performance. Refer to Question 8, Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures.

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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.

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