

Mail Stop 4561

February 28, 2008

Michael Klayko
Chief Executive 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 27, 2007
Filed December 21, 2007
Definitive Proxy Statement on Schedule 14A
Filed February 25, 2008
File No. 000-25601**

Dear Mr. Klayko:

We have reviewed the above referenced filings and have the following comments. If 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 supplemental 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.

Form 10-K for the Fiscal Year Ended October 27, 2007

Item 1. Business

Manufacturing, page 8

1. You do not appear to have filed your manufacturing agreement with Sanmina. In your response letter, please analyze whether you are substantially dependent upon

this agreement, and explain why you have not filed that agreement as an exhibit. See Item 601(b)(10)(ii)(B) of Regulation S-K.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 31

2. In future reports, please consider adding an overview to this section that would provide readers with management's perspective on the business. An overview that includes a discussion of economic or industry wide-factors that management believes are relevant to your company would provide context for the detailed information concerning your historical results. By including such a section you could provide additional insight into material opportunities, challenges and risks, such as those presented by known material trends and uncertainties, on which the company's executives are most focused for both the short and long term, as well as the actions they are taking to address these opportunities, challenges and risks. Refer to SEC Release No. 33-8350.
3. Please advise whether you considered including a separately captioned section to discuss any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on your financial condition. We refer you to Item 303(a)(4) of Regulation S-K.

Critical Accounting Policies, page 45

4. We note that you have identified certain significant estimates and assumptions that you make when preparing your financial statements. Your discussion should also indicate the accuracy of the estimate or assumption in the past and how much the estimate or assumption has changed in the past. For instance, we note from your disclosure on page 38 that you have revised certain estimates and assumptions related to facilities lease losses. Tell us how you considered the guidance in Section V of SEC Release No. 33-8350 in your disclosure.

Notes to Consolidated Financial Statements

Note 2. Summary of Significant Accounting Policies

Revenue Recognition, page 61

5. Please reconcile your revenue recognition policy with McDATA Corporation's revenue recognition policy as disclosed on page 10 of their Form 10-Q for the quarterly period ended October 31, 2006, incorporated by reference into your Form 8-K/A filed April 16, 2007. In this regard, we note the following two examples:

- Your disclosure indicates that revenue from sales to resellers are recognized using the sell-through method. This policy appears consistent with McDATA's revenue recognition policy for configured products, however they appear to have been recognizing revenue from non-configured products and components at the time of shipment.
- For multiple-element arrangements, you indicate that when applying the residual method, you allocate revenue to the undelivered elements based on VSOE and the residual revenue to the *delivered* element. It appears that McDATA allocated revenue to each element based on VSOE and the residual revenue to *any* remaining elements.

Describe in detail the reasons for retaining or conforming McDATA's revenue recognition policies, including the nature of the arrangements and the similarities and differences between the product offerings. As applicable, tell us what consideration you gave to disclosing the impact of any change in accounting policy on your pro forma financial statements. To the extent that McDATA's product offerings are new to Brocade, you should consider updating your revenue recognition policy to include the policies used for such arrangements.

Note 3. Acquisitions

McDATA Corporation, page 64

6. Provide us with your detailed calculation of the value of the shares issued as consideration for the acquisition of McDATA Corporation. Specifically, tell us the closing stock price(s) and date(s) used in your calculation of the purchase price for accounting purposes. In this regard, we note your disclosure on page 65 stating that the transaction was valued based on the closing stock price on January 26, 2007. However, it appears that the date the terms of the acquisition were agreed to and announced was August 8, 2006, based on your earnings release furnished as Exhibit 99.2 on Form 8-K filed August 8, 2006. Tell us how you considered the guidance in EITF 99-12 in your calculation.

Note 8. Convertible Subordinated Debt, page 74

7. You do not appear to have filed a Form 15 with respect to McDATA's 2.25% Convertible Subordinated Notes due 2010. Please tell us your analysis as to whether McDATA remains subject to Section 15(d) of the Securities Act with respect to the notes.

Definitive Proxy Statement on Schedule 14A

Executive Compensation and Other Matters

Annual Cash Incentives, page 31

8. We note that you have not provided a quantitative discussion of the company and individual performance targets that must be achieved in order for your named executive officers to earn their annual cash incentives. Please note that qualitative goals generally need to be presented to conform to the requirements of Item 402(b)(2)(v) of Regulation S-K. To the extent that it is appropriate to omit specific targets pursuant to Instruction 4 to Item 402(b) of Regulation S-K, general statements regarding the level of difficulty, or ease, associated with achieving performance goals either corporately or individually are not sufficient. In this regard, we note your disclosure on page 31 that “target levels were set at levels that the [Compensation] Committee believed were difficult to achieve” and that, given the inherent uncertainty of the Company’s actual financial performance and individual executive performance, you “are unable to more precisely quantify the probability that target performance...would be achieved.” In discussing how difficult it will be for the executive or how likely it will be for the Company to achieve the target levels or other factors, you should provide as much detail as necessary without providing information that poses a reasonable risk of competitive harm. Please advise.

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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 submit all correspondence and supplemental materials on EDGAR as required by Rule 101 of Regulation S-T. If you amend your filing(s), you may wish to provide us with marked copies of any amendment to expedite our review. Please furnish a cover letter that keys your response 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 response 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:

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

You may contact Melissa Walsh, Senior Staff Accountant, at (202) 551-3224 if you have any questions regarding comments on the financial statements and related matters. Please address questions regarding all other comments to Matthew Crispino, Staff Attorney, at (202) 551-3456 or Mark P. Shuman, Branch Chief – Legal at (202) 551-3462. If you need further assistance, you may contact me at (202) 551-3488.

Sincerely,

Stephen Krikorian
Accounting Branch Chief