

Mail Stop 6010

October 19, 2007

VIA U.S. MAIL AND FAX (818) 407-5656

Mr. Guy Avidan
Chief Financial Officer
MRV Communications, Inc.
20415 Nordhoff Street
Chatsworth, California 91311

**Re: MRV Communications, Inc.
Form 10-K for the year ended December 31, 2006
Filed March 6, 2007
Form 8-K/A filed October 1, 2007
File No. 001-11174**

Dear Mr. Avidan:

We have reviewed your response filed August 28, 2007 and Form 8-K/A filed October 1, 2007 and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. In our comments, we asked you to provide us with supplemental 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 comment 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 8-K/A filed October 1, 2007

Unaudited Pro Forma Condensed Consolidated Financial Information, page PF-1

1. In the third paragraph of the headnote to the pro forma data (page PF-1), we note you state that the allocation is preliminary and “may be different from the final allocation of the purchase price and such differences may be material.” Please expand the disclosure to state management’s opinion that upon final allocation of the purchase price there will be no material change from the preliminary allocation or disclose alternative results that could occur in accordance with the guidance in Item 11-02(b)(8) of Regulation S-X.

Unaudited Pro Forma Condensed Consolidated Statement of Operations for the Six Months Ended June 30, 2007, page PF-2

2. Disclose historical basic and diluted earnings per share on the face of the pro forma statements of income, together with the number of shares used to compute such per share data for Fiberxon. Refer to Article 11 of Regulation S-X.

Unaudited Pro Forma Condensed Consolidated Balance Sheet as of June 30, 2007, page PF-3

3. Total stockholder’s equity does not agree with total stockholder’s equity per the audited financial statements of MRV and Fiberxon. It appears that this amount is liabilities and stockholders’ equity. Please revise or advise.

Notes to Unaudited Pro Forma Condensed Financial Information, page PF-6

4. We refer to adjustments (1) and (7). We note that you have allocated \$106.4 million of the purchase price, approximately 81%, to “goodwill and intangible assets with indefinite lives.” Please tell us and revise to disclose the following about the intangible assets identified:

- the nature and amount of the intangible assets you have acquired;
- how you determined the estimated value assigned; and
- how you determined that the intangible assets have an indefinite life.

Also, provide more details of the reason for the significant amount to be allocated to goodwill. For example, explain the reason for the significant premium paid for the acquisition. Please be detailed in your response. We may have further comment after reviewing of your response.

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5. In this regard, we note in adjustment (1) that you refer to a “pending third party valuation.” While management may elect to take full responsibility for valuing the purchase price, if you choose to continue to refer to the expert in any capacity, you will have to revise the filing to name the independent valuation expert and include its consent as an exhibit.
6. We refer to adjustments (1) and (8). It appears that the amount of cash or number of shares of MRV common stock to be issued may be increased if Luminent does not successfully complete an initial public offering by Mach 27, 2009. We see that you included the deferred obligation of \$31.5 million as part of the purchase price. If Luminent does successfully complete the IPO by March 27, 2009, then the deferred consideration payment will be satisfied differently. Please revise to more clearly explain the potential impact of the two outcomes on the pro forma financial statements. It may be necessary to provide presentations using more than one set of assumptions. Refer to paragraphs 25-27 of SFAS 141 and Item 11-02(b)(8) of Regulation S-X for guidance.
7. We refer to adjustment (3). We see that you determined no pro forma adjustment was necessary for the recognition of share-based compensation expense relating to unvested options issued to employees of Fiberxon. Please tell us how your accounting complies with Question 17 of FIN 44, paragraph 85.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR as correspondence. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Julie Sherman, Staff Accountant, at (202) 551-3640 or me at (202) 551-3554 if you have any questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Angela Crane
Accounting Branch Chief