January 26, 2011

VIA EDGAR

United States Securities and Exchange Commission One Station Place 100 F Street, NE Washington, D.C. 20549-4561 Attn: Kathleen Collins Melissa Kindelan

> Re: VirnetX Holding Corporation Form 10-K for Fiscal Year Ended December 31, 2009 Filed March 31, 2010 Form 10-Q for Fiscal Quarter Ended June 30, 2009 Filed August 9, 2010 File No. 001-33852

Ladies and Gentlemen:

On behalf of VirnetX Holding Corporation (the "Company"), we hereby respond to the letter of the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") dated December 21, 2010 in connection with the aforementioned filings by the Company. For the Staff's convenience, we have repeated the comments of the Staff in bold italics with the Company's response thereto following immediately thereafter.

Form 10-K for the Fiscal Year ending December 31, 2009

Notes to Financial Statements

Note 8. Warrants, page 55

1. We note your response to prior comment 1. As indicated in our December 10, 2010 phone conversation with your independent auditors, the Staff continues to believe that the Series I warrants are not indexed to the company's own stock pursuant to the guidance in ASC 815-40-15 and accordingly, it appears that such warrants should be classified as liabilities. Please update us as to the company's consideration of this issue.

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As previously communicated to the Staff, the Company originally did not consider the Series I Warrants to be subject to liability accounting within the scope of Accounting Standards Codification 815-40-15, "Derivatives and Hedging – Contracts in Entity's Own Equity ("ASC 815-40-15"). However, in light of the Staff's comments, the Company has performed a re-assessment of the Series I Warrants and has concluded that the Series I Warrants are more properly classified as a liability within the scope of ASC 815-40-15 which will result in a fair value measurement of the Series I Warrants as a liability at issuance in September 2009, with changes in fair value recognized in the statement of operations for each subsequent applicable reporting period.

As a result of the reclassification of the Series I Warrants, the Company intends to file restated financial statements for the following periods as soon as reasonably practicable following completion of the review of these matters with its auditors: (i) the fiscal quarter ended September 30, 2009 included in its quarterly report on Form 10-Q as filed with the SEC on November 9, 2009; (ii) the fiscal year ended December 31, 2009 included in its annual report on Form 10-K as filed with the SEC on March 31, 2010; (iii) the fiscal quarter ended March 31, 2010 included in its quarterly report on Form 10-Q as filed with the SEC on August 9, 2010; (iii) the fiscal quarter ended March 31, 2010 included in its quarterly report on Form 10-Q as filed with the SEC on August 9, 2010; and (v) the fiscal quarter ended September 30, 2010 included in its quarterly report on Form 10-Q as filed with the SEC on November 30, 2010 included in its quarterly report on Form 10-Q as filed with the SEC on August 9, 2010; and (v) the fiscal quarter ended September 30, 2010 included in its quarterly report on Form 10-Q as filed with the SEC on November 8, 2010.

Form 10-Q for the Fiscal Quarter ending June 30, 2010

Notes to the Financial Statements

Note 11 — Litigation, page 10

2. We note from your response to prior comment 2 that you consider the litigation settlements to be multiple element arrangements. You further indicate that your analysis of the estimated fair value of the technology license element included estimated revenue from publicly filed financial statements, research reports, consultants and other sources. However, you do not note the specific results of your analysis other than you state no residual amount of the total settlement amount remained to allocate to the litigation settlement. Please provide us with specific information about your analysis including: the amounts of estimated revenue, discount rates, and other assumptions used as well as the specific sources from which the information was derived; tell us who performed the analysis and tell us the fair value of the technology license element as determined in your analysis.

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As previously communicated to the Staff, the Company determined during the jury trial in the Company's litigation against Microsoft that the estimated fair value of the technology license element could have a net present value of as much as \$942 million with an estimated \$240 million in revenues for past usage and the remainder in ongoing royalty revenue for future use for the life of the patents and therefore there was no residual amount to the total settlement amount left to allocate to the litigation settlement element. In making such determination, the Company relied in significant part on the analysis performed by Brett Reed, an economic consultant to the Company and a director and co-founder of Competition Economics, an economic consulting and research firm. Mr. Reed received a master's degree in economics from the University of California Los Angeles and a bachelor's degree in economics from the University of California Irvine. The Company believed that it was appropriate to rely on the economic analysis performed by Mr. Reed given his educational background and his experience of over 25 years as an economic consultant, including his particular area of expertise of intellectual property issues such as patent infringement damages and patent valuation.

Mr. Reed provided expert testimony at the jury trial in the Company's litigation against Microsoft regarding how he calculated the amount of reasonable royalties for the Company's patents, including the sources of information he relied upon, the discount rates and other assumptions he used in performing such calculation. The Company is supplementally providing to the Staff a copy of the trial transcript containing Mr. Reed's testimony.

Mr. Reed testified that he based his analysis on materials produced at trial by Microsoft and the Company and publicly available materials, including the approximately 25-30 depositions of Microsoft individuals and sales data. In addition, Mr. Reed testified that he analyzed the factors from the Georgia-Pacific Corp. vs. the United States Plywood Corp. case in calculating the reasonable royalty rate, including that he used the framework for analyzing these factors within the context of a hypothetical negotiation between a willing licensor and a willing licensee. As part of this hypothetical negotiation, Mr. Reed indicated that he considered the license agreements that SAIC has entered into with the Company, including the 15% running royalty rate, as well as the license agreements SAIC entered into with SafeNet and the 20% running royalty rate and that the Company and SAIC had plans for a security software product that would be priced at somewhere between \$13.50 to \$27 as well as a license with Microsoft that would apply to Microsoft products such as Windows XP and Microsoft Vista which would range from \$50 to above \$100. Mr. Reed also considered that the price for the applicable Microsoft products were within a range of \$50 to \$80 as well as the price range for other VPN security products that were within a range of 0.46% to 1.82% as well as the license agreements that Microsoft has entered into with respect to other company's patents.

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Based on the foregoing and Mr. Reed's analysis using the Georgia-Pacific Corp. factors, Mr. Reed started with an assessment of a 1% royalty rate per VirnetX patent relating to the Windows XP and Windows Vista products and a 3% royalty rate per VirnetX patent with respect to the OCS office communicator and LCS products. Mr. Reed also determined that it would be appropriate to apply a 10% quantity discount, which was the highest discount rate under the licensing program that Microsoft provided to other companies, given that Microsoft is a successful company with products that contain multiple features and functionality. Mr. Reed also determined that it was appropriate to phase in the royalty rate per VirnetX patent given the fact that the real time communications technology was in the process of development as well as the timing of the issuance of the Company's patents and determined to begin with applying a 0.33% royalty rate per VirnetX patent which increased to 0.66% per VirnetX patent in 2008, with the assumption that the royalty rate would not go up to 1% until 2012.

Next, Mr. Reed reviewed the revenue associated with Microsoft's United States activity in Windows XP and Windows Vista products consisting of \$48 billion in revenue and adjusted the price to only include home versions, and removed the additional revenue for the professional and business versions, thereby reducing the applicable Microsoft revenue to \$33 billion. Then Mr. Reed applied the 10% quantity discount to arrive at \$30 billion in revenue. Next Mr. Reed applied the 0.33% and 0.66% royalty rates discussed above to arrive at an estimate of the total reasonable royalty rates for the Company's patents of \$242 million through December 2009.

Mr. Reed also testified that he considered the depositions of Microsoft employees indicating that Microsoft preferred lump sum payment arrangements over running royalties arrangements in connection with its licensing agreements with third parties. Mr. Reed performed a calculation of the net present value as of the end of 2009 for the potential royalties associated with the Company's patents for the next ten years based on a variety of assumptions, including that the Company's patents expire in 2020 and taking into account the \$242 million in revenue through December 2009 and arrived at an estimate of the net present value of reasonable royalties of up to \$942 million.

As the Company entered into a settlement agreement with Microsoft for a one time lump sum payment of \$200 million in exchange for a license to the Company's patents, which amount was less than the \$242 million in reasonable royalty revenue through December 2009 and significantly less than the \$942 million in reasonable royalty revenue for the life of the Company's patents based on the analysis and testimony of Mr. Reed at trial, the Company determined that there was no residual amount to allocate to the litigation settlement element and allocated the entire amount to the fair value of the technology license element.

3. We note the proposed revenue recognition policy disclosures that you intend to include in future filings where you refer to SOP 97-2, SOP 98-4, SOP 98-9 and EITF 00-21. Please revise such disclosures to instead refer to the applicable ASC topics in the FASB Accounting Standards Codification.

The Company respectfully notes the Staff's comment and will revise its revenue recognition policy disclosures to refer to the applicable ASC topics in the FASB Accounting Standards Codification in its future filings.

Should you have any questions or comments regarding the foregoing, please don't hesitate to contact the undersigned at (650) 493-9300.

Sincerely,

WILSON SONSINI GOODRICH & ROSATI Professional Corporation

/s/ Melinda A. Anderson

Melinda A. Anderson