



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

September 2, 2016

Via E-mail

Sam Heidari

Chairman and Chief Executive Officer

Quantenna Communications, Inc.

3450 W. Warren Avenue

Fremont, CA 94538

**Re: Quantenna Communications, Inc.
Amendment No. 2 to
Draft Registration Statement on Form S-1
Submitted August 18, 2016
CIK No. 0001370702**

Dear Mr. Heidari:

We have reviewed your amended draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our August 4, 2016 letter.

Prospectus Summary, page 1

Industry Challenges, page 3

1. We note your revised disclosure in response to prior comment 4. Please expand your response to more fully address the implications presented by competing technologies. For example, given your disclosure that all competitors design their products in accordance with the same IEEE standards and that differentiation occurs by quickly introducing products supporting advanced specifications, please explain how long the "first-mover advantage" can be expected to last. As another example, if competitors

offer a wider array of products, please more clearly explain how focusing on advanced optional specifications aides in your competitive position. Your revised disclosure should clearly inform investors about the competitive conditions such that investors may understand how your business engages in its industry.

Business, page 64

Automated Network Management, page 68

2. Please revise your prospectus, where appropriate, to include the information contained in your supplemental response to prior comment 18.

Manufacturing, page 73

3. We note your response to prior comment 20. However, please reconcile your statement that your terms are “generally consistent” with typical industry practice with your statement that the terms vary from customer to customer.

Certain Relationships and Related Party Transactions, page 96

Agreement with RUSNANO, page 97

4. We note your revised disclosure in response to prior comment 21. Please revise to disclose your material rights and obligations, other than the funding requirements, that will remain post-offering. Provide similar disclosure regarding the rights and obligations of RUSNANO and its affiliates.
5. While we note the final sentence of this section, please revise to clarify whether the Period 2 funding requirement was met. In this regard, we note that your disclosure appears to be made as of a date prior to the Period 2 deadline.

Exhibits

6. We note that exhibit 10.17 contains reference to monitoring regulations and a Rusco account control agreement. Please submit these documents and any other related agreements with your next amendment or advise as to why you believe it is unnecessary. In addition, please confirm that Exhibit A to Exhibit 10.17 has been filed.

Sam Heidari
Quantenna Communications, Inc.
September 2, 2016
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You may contact Dennis Hult at (202) 551-3618 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Caleb French at (202) 551-6947 or Daniel Morris, Special Counsel, at (202) 551-3314 with any other questions.

Sincerely,

/s/ Daniel Morris for

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: John T. Sheridan, Esq.
Wilson Sonsini Goodrich & Rosati, P.C.