



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

May 17, 2016

Via E-mail

Joseph C. Sardano
President and Chief Executive Officer
Sensus Healthcare, Inc.
851 Broken Sound Pkwy. NW #215
Boca Raton, Florida 33487

**Re: Sensus Healthcare, Inc.
Amendment No. 3 to Registration Statement on Form S-1
Filed May 13, 2016
File No. 333-209451**

Dear Mr. Sardano:

We have reviewed your amended 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Summary historical financial data, page 10

1. We note from your statement of operations for the three months ended March 31, 2016 on page F-4 that your income from operations was \$9,588. However, in your summary historical financial data you have presented a loss from operations of \$9,588 for the three months ended March 31, 2016. Please revise your filing accordingly.

Manufacturing and supply, page 66

2. We note your revisions on pages 14-15 regarding a "preferred" radiation supplier. Please clarify the nature of your arrangement with this "preferred" supplier, such as whether a contract governs the relationship. Also, we note that other suppliers "exist" in the market; however, it's unclear how readily accessible radiation is from those other suppliers. Please clarify.

Joseph C. Sardano
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Financial Statements of Sensus Healthcare, Inc.

Statement of Stockholders' Equity, page F-5

3. We note that for the three months ended March 31, 2016, you charged offering costs of \$4,375 against your additional paid-in capital. Given we did not see disclosures in the filing of any sales of securities during the quarter ended March 31, 2016, please explain to us and revise the filing to disclose the nature of these offering costs and to explain why you recorded the costs against additional paid in capital.

You may contact Eric Atallah at (202) 551-3663 or Jay Webb, Senior Accountant, at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Geoff Kruczek at (202) 551-3641 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: David C. Scileppi, Esq.