



DIVISION OF
CORPORATION FINANCE

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

July 23, 2010

Manny Villafana
Chairman and Chief Executive Officer
Kips Bay Medical, Inc.
3405 Annapolis Lane North, Suite 200
Minneapolis, Minnesota, 55447

**Re: Kips Bay Medical, Inc.
Amendment No. 3 to Registration Statement on Form S-1
Filed July 8, 2010
File No. 333-165940**

Dear Mr. Villafana:

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.

Prospectus Summary, page 1

1. Please include a recent developments section to discuss any material developments since the conclusion of your quarterly period ended March 31, 2010.

If the core intellectual property relating to our eSVS MESH..., page 15

2. We note your response to prior comment 4. Please disclose the risk of reversion in your summary under "Risks Associated with Our Business" or tell us why you believe that revisions are unnecessary.
3. We note your response to prior comment 6 and reissue in part. Please provide a cross-reference to your disclosure under Intellectual Property on page 52.

Intellectual Property, page 52

4. We note your response to prior comment 8. Please revise this section to expand your discussion to more fully address the implication of your uncertain patent status, including the effect on your competitive position if patents do not issue.

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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

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You may contact Julie Sherman at (202) 551-3640 or Jeffrey Jaramillo, Accounting Branch Chief at (202) 551-3212 if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan at (202) 551-3269 or Daniel Morris, Special Counsel at (202) 551-3314 with any other questions.

Sincerely,

Russell Mancuso
Branch Chief

cc (by facsimile): Robert K. Ranum, Esq.