



DIVISION OF
CORPORATION FINANCE

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

June 13, 2011

Via E-mail

Brian R. Kahn
Chief Executive Officer
API Technologies Corp.
4705 S. Apopka Vineland Rd., Suite 210
Orlando, FL 32819

**Re: API Technologies Corp.
Registration Statement on Form S-3
Filed May 20, 2011
Amendment No. 1 to Registration Statement on Form S-3
Filed May 24, 2011
File No. 333-174398**

Dear Mr. Kahn:

We have limited our review of your registration statement to those issues we have addressed in our 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. Where 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.

1. Please provide us your analysis regarding whether you are eligible to conduct a primary offering on Form S-3 in reliance on General Instruction I.B.1 of that Form.

Selling Stockholders, page 19

2. Given the nature and size of the transaction being registered, please advise us of the company's basis for determining that the transaction is appropriately characterized as a transaction that is eligible to be made on a shelf basis under Rule 415(a)(1)(i). When addressing the factors mentioned in Securities Act Rules Compliance and Disclosure Interpretation 612.09, please address the size of the offering relative to the number of

your outstanding common shares held by non-affiliates before you initially issued the offered shares to the selling stockholders.

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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Please contact Gabriel Eckstein at (202) 551-3286 or Mary Beth Breslin, Senior Attorney, at (202) 551-3625 with any questions.

Sincerely,

/s/ Mary Beth Breslin for

Russell Mancuso
Branch Chief

cc (via e-mail): Bradley L. Finkelstein, Esq.
Wilson Sonsini Goodrich & Rosati, Professional Corporation