



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

Mail Stop 7010

September 25, 2007

via U.S. mail and facsimile

Grant C. Bennett
President and Treasurer
CPS Technologies Corporation
111 South Worcester Street
P.O. Box 338
Chartley, MA 02712-0338

**Re: CPS Technologies Corporation
Form 10-K for Fiscal Year Ended December 30, 2006
Form 10-Q for the Fiscal Quarter Ended June 30, 2007
File No. 000-16088**

Dear Mr. Bennett:

We have reviewed the above referenced filings and have the following comments. Please note we have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. We may ask you to provide us with supplemental information so we may better understand your disclosure. Please be as detailed as necessary in your explanation. After reviewing this information, we may raise additional comments.

Please understand the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the year ended December 30, 2006

Liquidity and Capital Resources

1. Please revise your liquidity and capital resources disclosures, in future filings, to discuss the underlying reasons for the changes in the account balances that affected your cash flows for the year. In this regard, your current disclosure appears to be a recitation of financial statement balances. Refer to guidance presented in Part IV of SEC Release 33-8350, *Commission Guidance Regarding*

Management's Discussion and Analysis of Financial Condition and Results of Operations. For example, please disclose why your accounts receivable increased 137% from December 31, 2005 to December 31, 2006 while your total revenue only increased 66% in 2006. Consider disclosing your days sales outstanding year over year to allow your readers to better understand the increase in your accounts receivable. Also explain the significant increase in your inventory and accounts payable balances year over year. These are illustrative examples and are not comprehensive.

(2)(g) Summary of Significant Accounting Policies, Revenue Recognition

2. In future filings, please disclose the amount of your consigned inventory at the end of each period presented. In this regard, we note your inventory balance increased from \$746,743 at December 31, 2005 to \$1.4 million at June 30, 2007 which you indicated in your Form 10-Q for June 30, 2007 was a result of an increase in consignment inventory.
3. We note your disclosure in the business section that discusses the fact that your customers purchase prototype and evaluation quantities of your products before purchasing production volumes. Please tell us the terms of these arrangements, including any return rights the customers may have if they are not satisfied with the prototypes or acceptance provisions that purport to be for trial or evaluation purposes and how you have considered these rights when recognizing revenue. Tell us how you revenue recognition for these items complies with SAB Topic 13A3.

(10) Concentrations of Credit Risk, Significant Customers and Geographic Information

4. We note your discussion under Specific Markets and Products that you discuss in detail; Lids and Heat Spreaders for High-Performance Microprocessors, Application-Specific Integrated Circuits and Other Integrated Circuits, Wireless Communications Infrastructure Applications, Motor Controller Applications, and Other Electronics Applications. In addition, we note your disclosures in your Form 10-Q for the quarterly period ended June 30, 2007, under Results of Operations for the Second Fiscal Quarter of 2007 Compared to the Second Fiscal Quarter of 2006, that, "revenue growth was strongest in lids and heat spreaders, revenue from baseplates used in motor controllers also increased while revenue from cellular telephone basestations declined." In light of the above, tell us what consideration you have given to providing revenue information by product pursuant to paragraph 37 of SFAS 131.

As appropriate, please respond to this comment within 10 business days or tell us when you will provide us with a response. Please furnish a letter on EDGAR that keys your response to our comment and provides any requested supplemental information. Detailed response letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your response to our comment.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Ryan Rohn at (202) 551-3739, Melissa Rocha at (202) 551-3854, or me at (202) 551-3355, if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Terence S. O'Brien
Branch Chief