

Mail Stop 6010

June 20, 2007

VIA U.S. Mail and Facsimile 510.657.4476

Mr. Gabriel B. Vegh
Chairman, CEO and Acting Chief Financial Officer
Cardima, Inc.
47266 Benicia Street
Fremont, CA 94538-7330

RE: **Cardima, Inc.**
Form 10-QSB for the Quarterly Period Ended March 31, 2007
Form 10-KSB/A for the fiscal year ended December 31, 2006
Form 10-KSB for the fiscal year ended December 31, 2006
Form 10-K for the fiscal year ended December 31, 2005
File No. 000-22419

Dear Mr. Vegh:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-KSB/A for the Fiscal Year Ended December 31, 2006

Financial Statements, page F-1

Note 1: Nature of Business and Summary of Significant Accounting Policies, page F-7

Warrants, page F-10

1. We note the disclosure that you account for your warrants as liabilities under SFAS 150.
 - Describe to us the significant terms of your warrants and your evaluation of those terms in determining that they meet the criteria in SFAS 150.
 - Highlight any differences from the analysis you previously provided in response to prior comment 13 of our letter dated October 18, 2006, where you indicated that the warrants were accounted for as liabilities based on the guidance in SFAS 133 and EITF 00-19.
 - Since this disclosure was not included in your December 31, 2005 Form 10-KSB, please tell us whether this represents a change from your accounting policy in prior periods.
 - Tell us how the guidance provided in FASB Staff Position No. EITF 00-19-2 impacted your accounting, if at all.
2. Notwithstanding the preceding comment, we note that the company did not appear to have a sufficient number of authorized and unissued common shares at December 31, 2006 to settle the warrants and conversion of the debt and exit and facility fees. As a result, it appears that the warrants would continue to be classified as liabilities pursuant to paragraph 19 of EITF 00-19. If true, please confirm our understanding and revise to correct the disclosure.
3. In addition, although you did not address the need to bifurcate the embedded features of the Apex debt, your response to prior comment 13 of our letter dated October 18, 2006 concludes that the Apex debt is not conventional convertible because Cardima did not meet either the “delivery of registered shares are controlled by a company” or the “ability to deliver unregistered shares” tests set forth in EITF 00-19. We note that these terms, while crucial to an analysis of the accounting and classification of the freestanding warrants, are not pertinent to the questions asked in paragraph 4 of EITF 00-19. Further, we note that Apex may only realize the value of the conversion options by exercising the option and receiving the entire proceeds in a fixed number of shares or the equivalent of cash. As such, if true, please confirm our understanding that the debt is conventional convertible as defined in paragraph 4 of EITF 00-19.

Note 2: Inventories, page F-12

4. You disclose that you recorded an adjustment to the lower of cost or market of \$7,000 in 2006. Your statement of cash flows reflects an increase to your net loss for excess and obsolete inventory of \$18,000. The net change in your inventory reserve between December 31, 2005 and 2006 is \$84,000. Please provide us with a rollforward of your inventory reserve from December 31, 2005 to December 31, 2006 and reconcile that information with the disclosures in this note and your statements of cash flows.
5. In addition, tell us what the \$18,000 relating to excess and obsolete inventory on your statement of cash flows represents. Tell us how that adjustment is consistent with the guidance in ARB 43, including footnote 2 thereof, and SAB Topic 5.BB which explain that the write-down of inventory to lower of cost or market creates a new cost basis for inventory that cannot be marked back up in subsequent periods.

Note 4: Loans Payable, page F-13

6. Please refer to prior comment 6 from our February 8, 2007 letter to you. We note that you have not responded to our prior comment letter. We re-issue our prior comment. We note that in addition to an extension of the maturity date of the note you agreed to increase the amount of the facility fee and the exit fee. You also lowered the exercise price of the old warrants and granted new warrants. EITF 96-19 requires you to “include all cash flows specified by the terms of the new debt instrument plus any amounts paid by the debtor to the creditor...” when determining whether there was a debt extinguishment or modification.
 - Provide us with your revised quantified analysis which takes these amounts into account when calculating whether the present value of the cash flows of the new debt instrument are at least 10 percent different from the present value of the remaining cash flows under the terms of the original instrument as discussed in EITF 96-19, or tell us how your current calculation complies.
 - If you determine that the amounts are substantially different, please provide us with your revised calculations to initially record the new debt instrument at fair value, your determination of the amount of the debt extinguishment gain or loss to be recognized and the effective rate of the new instrument.

Note 6: Note Payable to Related Parties, page F-15

7. From our review of your December 31, 2005 Form 10-KSB, we note that as of December 31, 2005 the note receivable plus interest was \$217,500 and you had fully reserved for this amount. We noted no discussion of the contingent liability to Mr. Wheeler. Please respond to the following:

- Tell us whether and where you discussed the dispute and contingent liability with Mr. Wheeler in your December 31, 2005 Form 10-KSB. [If not, tell us why.](#)
- Tell us whether you had recorded any liability for the claim by Mr. Wheeler as of December 31, 2005.
- Tell us and [revise your next 10-QSB](#) to disclose the significant terms of the settlement agreement with Mr. Wheeler. We note your disclosure on page F-15. Please include a discussion of your agreement with respect to the note receivable.
- Since you had fully reserved for the note and interest of \$217,500 as of December 31, 2005, please [describe to us](#) the entries you recorded in your financial statements so that you now have a net receivable of \$162,022 netted against your payable.
- Explain how you are accounting for the note receivable and why. Cite the accounting literature upon which you relied.
- Provide us with the journal entries you made to record the note payable of \$232,287.
- Explain how you are accounting for the note payable and why. Cite the accounting literature upon which you relied. Include a discussion of the timing of when you recorded the liability.
- Tell us why you have netted the note payable against the note receivable. Cite the accounting literature upon which you relied.
- Reconcile with the information disclosed here and that provided in Note 8 of your March 31, 2007 Form 10-QSB. We note that the disclosures are not entirely consistent.

Note 9: Concentrations of Risk, page F-16

8. You disclose that you had no sales in Japan during the first quarter of 2007 and you may have limited or no sales in Japan in the future. In future filings, include in your MD&A a discussion of any known trends, events or uncertainties that have had or that are reasonably expected to have a material impact on net sales or revenues or income from continuing operations, consistent with Item 303(b)(1)(iv) of Regulation S-B.

Note 11: Stock Based Compensation, page F-18

9. Please tell us and disclose in future filings the information required by paragraphs A240 (d)(1), (d)(2), (e)(2) and (h) of SFAS 123R.

Exhibit 31.1 - Certification

10. We note that the identification of the certifying individual at the beginning of the certification, required by Exchange Act Rule 13a-14(a), also includes the title of the certifying individual. Please revise the certifications in future filings to remove the individual's title when identifying the certifying individual at the beginning of the certification.
11. In addition, we note that you replaced the words "small business issuer" with "registrant," modified the language at the beginning of paragraph 4 and 5, and changed the capitalization of the words at the beginning of the subparagraphs in paragraphs 4 and 5. In future filings, please revise the certifications to reflect the exact form set forth in Item 601(b)(31) of Regulation S-B.
12. In future filings, please comply fully with the requirements of Item 302(a) of Regulation S-T which provides guidance on including required signatures, including those of your certifying officers and auditors, in electronic filings.

Form 10-QSB for the Quarterly Period Ended March 31, 2007

Note 6: Loans Payable, page 9

13. We note your disclosure in the last paragraph on page 10. Please tell us in more detail how you will account for the new agreement and why. Cite the accounting literature upon which you will rely. Please also refer to our other comments on your loans with APIX.

Mr. Gabriel B. Vegh
Cardima, Inc.
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Form 10-K for the Fiscal Year Ended December 31, 2005

Note 1: Nature of Business and Summary of Significant Accounting Policies, page F-8

- Reclassification of Previously Reported Financial Results, page F-8

14. Please refer to prior comment 2 from our February 8, 2007 letter. We note that you have not responded to our prior comment letter, nor have you amended your December 31, 2005 Form 10-KSB as previously requested. We note from your response that “the original entry was not in accordance with GAAP, and that this was a correction of an accounting error and a misapplication of GAAP.” “Specifically, the impairment loss that was established was not in accordance with FASB 144 for determining the amount of the impairment.” Please note that it is not appropriate to refer to this error as a “reclassification.” In addition, your proposed disclosure in Exhibit B to your response does not appear to provide all of the disclosures required by APB 20. Please amend [the filing to include revised disclosure](#) consistent with paragraph 37 of APB 20 [describing](#) in sufficient detail the nature of the error in your previously filed financial statements. [Label all the appropriate columns as “restated.”](#)

* * * *

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

You may contact Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 or me, at (202) 551-3671, if you have questions regarding these comments

Sincerely,

Martin F. James
Senior Assistant Chief Accountant