



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

April 21, 2008

VIA U.S. Mail and Facsimile 510.657.4476

John R. Cheney
Chief Executive Officer and
Chief Financial Officer
Cardima, Inc.
47266 Benicia Street
Fremont, CA 94538-7330

RE: **Cardima, Inc.**
Form 10-KSB for the fiscal year ended December 31, 2007
Filed April 15, 2008
File No. 000-22419

Dear Mr. Cheney:

We have reviewed your filing 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 for the fiscal year ended December 31, 2007

Item 8A. Controls and Procedures, page 37

1. We note the discussion of the “ineffective controls” you identified in the fifth paragraph of the section and note that these represent material weakness in your internal controls over financial reporting. In future filings, including any amendments, in order to provide full disclosure relating to any material weaknesses identified by management, please use the term material weakness in your disclosures. See Question 20 to Management’s Report on Internal Control over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, Frequently Asked Questions as revised in October 6, 2004.
2. Please amend the filing to disclose in greater detail the nature of the material weaknesses identified and their impact on your financial reporting and control environment. In this regard, also revise to disclose the specific steps that the company has taken, if any, to remediate the material weaknesses. Refer to Section E of Staff Statement on Management’s Report on Internal Control over Financial Reporting available on our website at www.sec.gov/info/accountants/stafficreporting.pdf.
3. We note your disclosure that “[t]here were no changes to the internal controls, except as described in the previous paragraph, during the fourth quarter ended December 31, 2007, that have materially affected or that are reasonably likely to affect the internal controls.” Revise to state clearly, if correct, that there *were* changes in your internal controls over financial reporting that occurred during this quarter that have materially affected, or are reasonably likely to materially affect, your internal control over financial reporting.
4. **In light of the** material weaknesses **that** existed, please revise the filing to disclose in reasonable detail the basis for your officer’s conclusions that the company’s disclosure controls and procedures were nonetheless effective as of the end of the period covered by the report. Include a discussion of the alternate factors relied upon and clearly communicate how the conclusion was reached.

Financial Statements, page F-1

Note 2. Extinguishment of Debt, page F-19

5. You did not include the table showing the computation of the loss on extinguishment of debt on page F-19. Please include the table in the amended 10-KSB. Please be sufficiently detailed so that an investor can reconcile the amount of the 2007 loss on debt extinguishment of \$15,182,000 disclosed on pages F-5 and F-19 to the discussion of those losses on page F-17 which indicates that losses of \$6,329,000 (net of taxes) and \$3,800,000 were recorded in 2007.

Note 8. Concentrations of Risk, page F-22

6. We note your response to prior comment 17 from our January 30, 2008 letter. We also note your disclosure that “in compliance with local import rules, the Japanese distributor returned a total of \$85,000 of products during the second quarter of 2007.” On page F-9 you disclose that the distributors “do not have any price protection or return rights” and they “assume the title and risk of loss at the shipping point.” Please tell us about your consideration of this distributor’s return rights on your revenue recognition policy and why you accepted the return of the inventory.
7. Further, with respect to your response, please tell us whether you adjusted sales or cost of sales for the return. Your response only refers to adjustments made to inventory and accounts receivable.

Note 10. Stock Based Compensation, page F-24

8. We note your response to comment 1 from our January 30, 2008 letter. However, we continue to note that certain disclosures were not provided in your December 31, 2007 Form 10-KSB. In future filings, including any amendments, please disclose the following:
 - The weighted-average period over which you expect to recognize your unamortized stock compensation expense of \$2,243,000 as required by paragraph A240 (h) of SFAS 123R.
 - The weighted average remaining contractual term of options currently exercisable as required by paragraph A240(d)(2) of SFAS 123R.
 - For each year for which you present a statement of operations, a description of the significant assumptions used under the Black- Scholes method to estimate the fair value of your share-based compensation awards, including (as applicable) the expected term, expected volatility and risk-free rate as required by paragraph A240(e)(2) of SFAS 123R.

- A discussion of the method you used to determine the expected term, expected volatility and risk-free rate as required by paragraph A240 (e)(2) of SFAS 123R.
9. We note from page F-28 that you have a 1997 employee stock purchase plan and that shares were issued under the plan in 2007 and 2006. We further note that under this plan “eligible employees may purchase common stock at a price equal to the lower of : (i) 85% of the fair market value of the common stock on the offering date; or (ii) 85% of the fair market value of the common stock on the purchase date.” Since there is no disclosure with respect to the compensation expense related to this plan, please tell us how you considered paragraph 12 of SFAS 123R in determining that the plan is not compensatory. Otherwise, if you are accounting for the plan as compensatory, please tell us and revise future filings, including any amendments, to provide all of the disclosures required by paragraph 64 of SFAS 123R.

Note 12. Restatement of Financial Statements, page F-29

10. Please refer to comment 6 from our January 30, 2008 letter. Please amend your December 31, 2007 Form 10-KSB to include, consistent with paragraph 26 of SFAS 154, the effect of the corrections on each financial statement line item, including changes made to line items in your statements of shareholders’ equity and statements of cash flows for each period presented.
11. In your response to prior comment 4 from our letter dated January 30, 2008, you told us that you would file the restated March 31, 2006 financial statements in your December 31, 2007 Form 10-KSB. We could not find those restated financial statements. In addition, as noted from your Item 4.02 Form 8-K filed on March 26, 2008, you are restating the other interim periods within fiscal 2006. Please file an amendment to your December 31, 2007 Form 10-K that includes all of the disclosures required by SFAS 154 for the restatements of your March 31, June 30, and September 30, 2006 financial statements.
12. As noted in comment 9 from our January 30, 2008 letter, and consistent with your responses, you did not have sufficient authorized and unissued common shares as of June 30, 2006, September 30, 2006, December 31, 2006 and March 31, 2007 to settle the warrants, the conversion of the debt, the exit fees and the facility fees. Due to your reverse stock split during the quarter ending June 30, 2007, you had sufficient authorized and unissued common shares to satisfy your obligations after that time. For each period that you did not have sufficient authorized and unissued common shares, then it appears that under paragraph 19 of EITF 00-19, you would classify the warrants as liabilities as of each applicable balance sheet date and measure them at fair value. Please respond to the following:

- Please explain why you have restated your financial statements to remove the warrant liability from your balance sheet and the associated net changes in the fair value of the warrant liability each period from your statements of operations. Discuss how you applied paragraph 19 of EITF 00-19.
- We note the adjustments you are making each period for the accrual of the excess share liability. Further, we note the calculations underlying these adjustments in Exhibit III of your response. The calculation shows that you are charging the statement of operations in each period for the aggregate fair market value of the shares that you may have to issue that are in excess of your authorized shares. Please tell us the U.S. GAAP accounting literature upon which you relied for this accounting and explain how you applied the literature.

Exhibit 31.1 - Certification

13. We note that the certification signed by Mr. Cheney is not in the exact form required as outlined in Exhibit 31 of Regulation S-B. For example, we note that the word “report” was replaced with “annual report” in paragraphs 2, 3 and 4; the word “small business issuer” was replaced with “registrant” in paragraphs 3, 4 and 5; the phrase “of internal control over financial reporting” was deleted from paragraph 5; the phrases “and material weaknesses” and “over financial reporting” were deleted from paragraph 5(a); the phrase “are reasonably likely to” was deleted and replaced by the word “could” and the word “information” was deleted and replaced by the phrase “data and have identified for the registrant’s auditors any material weaknesses in internal controls.” Please file an amendment to the Form 10-KSB to include a new, corrected certification using the exact wording shown in Exhibit 31. Please note that, consistent with Q&A 10 in the Division of Corporation Finance: Sarbanes-Oxley Act of 2002 – Frequently Asked Questions (issued November 8, 2002, revised November 14, 2002) available on our website at <http://www.sec.gov/divisions/corpfin/faqs/soxact2002.htm> you may revise the beginning of the sentences in paragraphs 4 and 5 of the certification to make them singular when only one person is certifying your periodic report.

John R. Cheney
Cardima, Inc.
April 21, 2008
Page 6

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 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