



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-3628

February 16, 2011

Via facsimile to ((415) 281-1350) and U.S. Mail

David K. Michaels, Esq.
Fenwick & West LLP
Silicon Valley Center
801 California Street
Mountain View, CA 94041

**Re: RAE Systems, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed February 1, 2011
File No. 001-31783**

**Schedule 13E-3
Filed February 1, 2011
File No. 005-58813**

**Filed by RAE Systems Inc., Ray Holding Corporation, Ray Merger
Sub Corporation, Vector Capital III, L.P., Vector Entrepreneur
Fund III, L.P., Vector Capital IV, L.P., Vector Capital
Partners III, L.P., Vector Capital Partners IV, L.P.,
Vector Capital, L.L.C, Alexander R. Slusky, Chen Revocable Trust
Dtd 5/8/2001, Chen Family Foundation, Hsi Family Trust,
Robert I. Chen, Peter C. Hsi, and Lien Q. Chen**

Dear Mr. Michaels:

We have reviewed your filing 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 filing, by providing the requested information, or by advising us when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

Schedule 13E-3

1. Please delete the language in the last two paragraphs on page 3 as it attempts to disclaim (i) responsibility for disclosure made by all of the filing persons and (ii) an obligation to file the Schedule 13E-3.
2. We note that PSIL and CITIC have committed to provide equity financing to Vector entities and will hold approximately 9.6% of the equity following the current transaction. We believe these persons are also engaged in the going private transaction. Please add them as filing persons on the Schedule 13E-3 or explain why they should not be so included.
3. Each filing person must individually comply with the filing, dissemination, disclosure and signature requirements of Schedule 13E-3. Therefore, if you add PSIL and CITIC as filing persons, you will need to include all of the information required by Schedule 13E-3 and its instructions for each of them. In addition, be sure that each new filer signs the Schedule 13E-3.
4. Please include all information from Item 3 in the proxy statement distributed to security holders.

Preliminary Schedule 14A

General

5. We note that Purchaser intends to raise \$30 million in debt financing. We also note that it is unclear whether financing for the transaction is assured. Please provide us your detailed legal analysis of the requirement by the Purchaser and its affiliates to provide the financial information required by Item 14 of Schedule 14A.

Background of the Merger, page 12

6. Refer to the entry for January 14, 2011. Please explain why Mr. Chen believed that CITIC's investment might be advantageous to the company because of its financial resources and relationships in China. Describe the financial resources and relationships Mr. Chen referenced.
7. Refer to the discussion of the negotiations with Battery Ventures on its offer of \$1.85 per share. Explain in your disclosure why there was uncertainty as to enforceability of the rollover agreements and the obligations thereunder by the Rollover Holders. We note that the rollover agreements were initially negotiated prior to the execution of the Battery merger agreement, which included the possibility that a superior offer would be presented and that battery Ventures would attempt to match the superior offer.

Reasons for the Merger of RAE Systems and Recommendation of the Board of Directors, page 26

8. Please revise your disclosure to describe what consideration the special committee and board of directors gave to the decision by Mr. Chen and Dr. Hsi to withdraw support from a transaction with Battery Ventures at a higher consideration than the current transaction. Explain why the special committee and board of directors gave such weight to this decision even though a transaction with Battery Ventures could be approved by your security holders regardless of the way Mr. Chen, Dr. Hsi and Vector voted their shares. Finally, describe whether the special committee attempted to negotiate the elimination of the condition Battery Ventures placed on its offer that required the support of Mr. Chen and Dr. Hsi.
9. Refer to the fourth bullet point of this section. Please explain how the special committee and board of directors concluded that Vector Capital had the financial resources to complete the merger when Vector Capital has indicated that it intends to obtain debt financing for the transaction.

Opinion of the Financial Advisor to RAE Systems' Special Committee, page 31

10. Revise your disclosure to explain why the special committee did not request UBS to update its fairness opinion.

Security Ownership of Certain Beneficial Owners, page 84

11. Please revise the entry for Vector Capital to include all shares it beneficially owns and which it reported in its January 28, 2011 Schedule 13D. Also, it is unclear why footnote 3 to the table raises doubts as to the beneficial ownership of shares held by the Voting Parties: please advise or revise.

Transactions in Shares – Securities Transactions Within 2 Years, page 86

12. It is unclear why you state that the Purchaser Group has not acquired any RAE Systems shares in the past 2 years in light of the disclosure in the Purchaser Group's Schedule 13D that it acquired 2.9 million shares on September 21 and 22, 2010. Please advise or revise.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the filing persons are in possession of all facts relating to the disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

David K. Michaels, Esq.
Fenwick & West LLP
February 16, 2011
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In responding to our comments, please provide a written statement from each filing person acknowledging that:

- the filing person 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 filing person 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.

Please direct any questions to me at (202) 551-3619. You may also contact me via facsimile at (202) 772-9203. Please send all correspondence to us at the following ZIP code: 20549-3628.

Sincerely,

Daniel F. Duchovny
Special Counsel
Office of Mergers & Acquisitions