

Mail Stop 3561

August 10, 2009

Asher Zwebner, Interim Chief Executive Officer
Suspect Detection Systems, Inc.
4 Nafcha Street
Jerusalem, Israel 95508

**Re: Suspect Detection Systems Inc.
Revised Preliminary Proxy Statement on Schedule 14A
Filed July 14, 2009
Form 8-K
Filed July 14, 2009
File No. 000-52792**

Dear Mr. Zwebner:

We have reviewed your letter dated July 14, 2009 and your revised preliminary proxy statement and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. After reviewing this information, we may raise additional comments. Please feel free to call us at the telephone numbers listed at the end of this letter.

Revised Preliminary Proxy Statement on Schedule 14A

How many votes are required to approve the proposals?, page 5

1. We note your response to comment 1 of our letter dated June 24, 2009. While in your response letter you state that "Amendment No. 2 amends the Proxy Statement to reflect that the number of voting shares required to constitute a simple majority is 16,452,418[,]" in fact, you changed the number in your proxy statement at the bottom of page 5 from 16,525,419 to 16,525,418, which is still incorrect. Please revise or advise.

Proposal No. 1: Increase in the Number of Authorized Shares of Common Stock, page 6

2. We note your response to comment 2 of our letter dated June 24, 2009. Please disclose in your proxy statement the information that you provided to us in your response.
3. In addition, there appears to be a discrepancy between the information in your response letter and the information included in the warrant agreement attached as Exhibit 4.2 to the Form 8-K filed on July 14, 2009. In your letter, you state that the company issued 3,200,000 stock purchase warrants to NG-The Northern Group LP with an expiration date of July 9, 2011, whereas the warrant agreement covers 2,250,000 stock purchase warrants with an expiration date of July 8, 2011. Therefore, please confirm the amount issued and the warrant expiration date and revise your disclosure, as necessary.
4. We note your response to comment 3 of our letter dated June 24, 2009. In your revised disclosure on page 7 based on that comment, you state that the proposed amendment to your certificate of incorporation will not affect the terms of the outstanding common stock or the rights of the holders of common stock, "except for effects incidental to increasing the number of shares of common stock outstanding, such as dilution of the earnings per share, which could have a depressive effect upon the market value of the Company's common stock and an adverse effect on the voting rights of current holders of common stock as their percentage ownership of the Company will be reduced." Please discuss in greater detail the incidental effects to which you refer. In this regard, please describe the dilution of the earnings per share, the depressive effect upon the market value of your current shareholders' common stock, the adverse effect on the voting rights of your current shareholders, and the dilution of your current shareholders' equity interests. Also, you state that you believe that the issuance of additional shares to raise capital and compensate employees "outweighs any of the disadvantages associated with the increase in the authorized shares of Common Stock." Please discuss the reasons for this belief.

Form 8-K Filed on July 14, 2009

5. Please file an amendment to your Form 8-K to furnish the information set forth in paragraph (d) of Item 701 of Regulation S-K. See Item 3.02(a) of Form 8-K.

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. If you revise one of your filings, you may wish to provide us with marked copies of the revision to expedite our review. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your revision and responses to our comments.

Please contact Alexandra M. Ledbetter, Staff Attorney, at (202) 551-3317, John R. Fieldsend, Staff Attorney, at (202) 551-3343 or me at (202) 551-3720 with any questions.

Sincerely,

H. Christopher Owings
Assistant Director

cc: David Lubin, Esq.
David Lubin & Associates, PLLC
Facsimile No. (516) 536-5753