



DIVISION OF  
CORPORATION FINANCE

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

October 5, 2010

Mr. Gil Boosidan  
Chief Executive Officer  
Suspect Detection Systems, Inc.  
150 West 56th Street, Suite 4005  
New York, NY 10019

**Re: Suspect Detection Systems, Inc.**  
**Form 10-K for the Fiscal Year Ended December 31, 2009**  
**Filed April 14, 2010**  
**Form 10-Q for Quarter Ended March 31, 2010**  
**Filed May 18, 2010**  
**File No. 00-52792**

Dear Mr. Boosidan:

We issued comments to you on the above captioned filings on August 23, 2010. As of the date of this letter, these comments remain outstanding and unresolved. We expect you to contact us by October 20, 2010, to provide a substantive response to these comments or to advise us why you are unable to respond and when you will be able to do so.

If you do not respond to the outstanding comments or contact us by October 20, 2010, we will, consistent with our obligations under the federal securities laws, decide how we will seek to resolve material outstanding comments and complete our review of your filings and your disclosure. Among other things, we may decide to release publicly, through the agency's EDGAR system, all correspondence, including this letter, relating to the review of your filings, consistent with the staff's decision to release publicly comment letters and response letters relating to disclosure filings it has reviewed. You can find more information about the staff's decision to release filing correspondence at <http://www.sec.gov/news/press/2004-89.htm> and <http://www.sec.gov/news/press/2005-72.htm>.

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Please contact Scott Stringer, Staff Accountant, at 202-551-3272 or Robert Babula, Staff Accountant, at 202-551-3339 if you have questions.

Sincerely,  
/s/ Andrew Mew  
Accounting Branch Chief