

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

Mail Stop 3030

April 29, 2010

Andrew G. Sculley Chief Executive Officer eMagin Corporation 3006 Northup Way, Suite 103 Bellevue, WA 98004

Re: eMagin Corporation

Amendment No. 3 to Registration Statement on Form S-1

Filed April 15, 2010 File No. 333-160147

Dear Mr. Sculley:

We have limited our review of your filing to those issues we have addressed in our comments. 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.

Risk Factors, page 7

1. Please tell us why you did not include in this filing the risk factor from page 7 of your amended Form S-1 filed January 20, 2010 that you may be subject to fines, sanctions, and/or penalties of an indeterminable nature regarding your July 2006 note purchase agreement with Stillwater.

Andrew G. Sculley eMagin Corporation April 29, 2010 Page 2

Plan of Distribution, page 47

2. Please reconcile your added disclosure in the first paragraph of this section that the exercise of warrants is being registered pursuant to this registration statement with your disclosure throughout the filing that the prospectus covers the resale of the shares of common stock underlying the warrants.

Selling Stockholders, page 49

- 3. Regarding your response to prior comment 5:
 - Please tell us why your disclosure in this section does not include the 8% senior convertible note that you issued to Iroquois Master Fund and the 189,743 underlying shares of common stock that you mention in footnote 11 on page 53 of your Form S-1 filed April 29, 2008.
 - Please tell us why the table on page 51 does not include the 162,500 shares and the 485,000 shares that you issued to Moriah Capital that you mention in the fifth paragraph on page 50 and in the sixth bullet on page 50, respectively.
- 4. Based on your disclosure in the second paragraph on page 50 and in the second footnote (ii) on page 52, it appears that, after the 2006 registration statement was effective, you issued in substance a new security to the stockholder and then the registration statement related to the previous security was used to resell the stock underlying the new security. Please provide us your analysis supporting your conclusions regarding how it is consistent with Section 5 of the Securities Act to use a registration statement related to the resale of stock underlying a previous security to resell stock underlying a different security.
- 5. Based on your revisions in response to the first bullet point of prior comment 6, please revise your disclosure in your selling stockholders table regarding the percentage of your common stock beneficially owned prior to the offering. The calculation of the percentage of a class of securities beneficially owned by a selling stockholder should not be based on the number of outstanding shares plus <u>all</u> shares underlying outstanding warrants, options and convertible notes; rather, the calculation of the percentage of shares beneficially owned by a selling stockholder should include in the denominator outstanding shares plus only those shares for which that selling stockholder has the right to acquire beneficial ownership within 60 days. Please also revise the calculations in your table on page 46 accordingly, and add any additional greater than 5% beneficial owners based on the corrected calculations.

Andrew G. Sculley eMagin Corporation April 29, 2010 Page 3

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment

Andrew G. Sculley eMagin Corporation April 29, 2010 Page 4

for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Tom Jones at (202) 551-3602 or me at (202) 551-3617 if you have any questions.

Sincerely,

Russell Mancuso Branch Chief

cc (via fax): Richard A. Friedman, Esq.