

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Section 5 – Corporate Governance and Management

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(e) On April 23 and 22, 2014, Image Sensing Systems, Inc. (the “Company”) entered into Amended and Restated Employment Agreements (the “2014 Employment Agreements”) with Kris B. Tufto, as the Company’s President and Chief Executive Officer, and Dale E. Parker, as its Chief Operating Officer, Chief Financial Officer and Treasurer. The 2014 Employment Agreements supersede the Employment Agreement between the Company and Mr. Tufto dated as of October 30, 2012 and the Employment Agreement between the Company and Mr. Parker dated as of June 25, 2013 (collectively, the “Original Agreements”); however, under the 2014 Employment Agreements, Mr. Tufto and Mr. Parker each acknowledges and reaffirms the provisions of the Confidentiality, Noncompetition and Invention Assignment Agreement attached to his Original Agreement.

The 2014 Employment Agreement between the Company and Mr. Tufto provides for a base salary for the year ending December 31, 2014 of \$300,000, and the 2014 Employment Agreement between the Company and Mr. Parker provides for a base salary for the year ending December 31, 2014 of \$230,000. The 2014 Employment Agreements also provide that Mr. Tufto and Mr. Parker will receive a bonus to be determined by the Company’s Board of Directors and that Mr. Tufto and Mr. Parker are entitled to insurance and other benefits in accordance with the Company’s standard and executive benefits.

Under the 2014 Employment Agreements, Mr. Tufto and Mr. Parker are at-will employees of the Company, and their employment may be terminated by the Company or such employee at any time.

The 2014 Employment Agreements provide for the following compensation and benefits upon termination of employment:

If the termination of employment is voluntary on the part of Mr. Tufto or Mr. Parker and not for “Good Reason” as defined in the 2014 Employment Agreements, the Company must pay to Mr. Tufto or Mr. Parker all earned and unpaid amounts due to him for salary through the termination date and a pro rata portion of any incentive pay to which he would have been entitled had he remained in the Company’s employ, and Mr. Tufto or Mr. Parker will have 90 days to exercise all options to purchase shares of the Company’s common stock that he owns and are exercisable at the termination date. Any other options and any unvested restricted stock or restricted stock units for the Company’s common stock that he owns will terminate.

If the termination of employment is “With Cause” as defined in the 2014 Employment Agreements, Mr. Tufto or Mr. Parker will not be entitled to any severance, and any and all options, restricted stock and restricted stock units for the

Company's common stock that he owns will terminate.

If the termination is "Without Cause" as defined in the 2014 Employment Agreements, Mr. Tufto or Mr. Parker will be entitled to 12 months of salary continuation, without eligibility for bonus, and he will have 90 days to exercise all options to purchase shares of the Company's common stock that he owns and that are exercisable at the termination date. Any other options and any unvested restricted stock or restricted stock units for the Company's common stock owned by him will terminate.

Upon a "Change in Control Termination" as defined in the 2014 Employment Agreements, the Company will pay to Mr. Tufto or Mr. Parker a severance payment equal to twice and 1.5 times the amount of his annual salary, respectively, and the total annual incentive pay to which he is entitled; any and all outstanding unvested options to purchase the Company's common stock owned by him with an exercise price that is less than "Fair Market Value" of such common stock will vest and he will have 90 days to exercise all options; the risks of forfeiture on any restricted stock or restricted stock units owned by him will lapse; and for a period beginning on the date of the Change in Control Termination and ending on the earlier of the date that Mr. Tufto or Mr. Parker obtains new employment or two years after the date of the Change in Control Termination, the Company will provide a continuation of the group medical insurance coverage previously provided to Mr. Tufto or Mr. Parker by the Company and pay that portion of the premium for group medical insurance that it paid during his employment.

Under the 2014 Employment Agreements, the Company will be obligated to make the payments and provide the benefits to Mr. Tufto and Mr. Parker if his employment is terminated Without Cause or upon a Change in Control Termination only if Mr. Tufto or Mr. Parker has signed a release agreement, the form of which is attached to the 2014 Employment Agreements.

The term “Change in Control Termination” as defined in the 2014 Employment Agreements means that, upon or within 12 months after a “Change in Control,” Mr. Tufto’s or Mr. Parker’s employment is terminated for any reason other than “With Cause” or Mr. Tufto or Mr. Parker terminates his employment for “Good Reason.”

The foregoing description of the 2014 Employment Agreements is qualified in its entirety by reference to the 2014 Employment Agreements, copies of which will be filed as exhibits to the Company’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2014.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Image Sensing Systems, Inc.

Date: April 23, 2014

By /s/ Dale E. Parker
Chief Financial Officer (Principal Financial Officer and
Principal Accounting Officer)