



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

September 22, 2016

Via E-mail

Phillip LoPresti
Chief Executive Officer
Everspin Technologies, Inc.
1347 N. Alma School Road Suite 220
Chandler, Arizona 85224

**Re: Everspin Technologies, Inc.
Registration Statement on Form S-1
Filed September 9, 2016
File No. 333-213569**

Dear Mr. LoPresti:

We have reviewed your registration statement 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 registration statement and providing the requested information. 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Use of Proceeds, page 35

1. We note that you expect to use a portion of the net proceeds to make payments under your agreement with GLOBALFOUNDRIES. Since it appears that your failure to make this payment may have a significant adverse effect on your relationship with GLOBALFOUNDRIES, please revise to explain whether there is any uncertainty to your intent to use proceeds to make this payment and explain additional details about the material terms of this liability to GLOBALFOUNDRIES.

Quarterly Results of Operations, page 52

2. Provide additional details about what you mean by “yield issues” in the third paragraph on page 53. Does this relate to “break downs in mechanical systems, equipment failures or calibration errors” or some other cause?

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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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 you request acceleration of the effective date of the pending registration statement, please provide a written statement from the company 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Phillip LoPresti
Everspin Technologies, Inc.
September 22, 2016
Page 3

You may contact Michael Fay at (202) 551-3812 or Gary Todd, Senior Accountant, at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Laurie Abbott at (202) 551-8071 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Matthew B. Hemington, Esq.
Cooley LLP