

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

July 7, 2011

Via E-Mail

Jay T. Flatley President, Chief Executive Officer and Director Illumina, Inc. 9885 Towne Centre Drive, San Diego, CA 92121

Re: Illumina, Inc.

Form 10-K for the Fiscal Year Ended January 2, 2011

Filed February 28, 2011 File No. 000-30361

Dear Mr. Flatley:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. 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 Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Jeffrey Jaramillo

Jeffrey Jaramillo Accounting Branch Chief