



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3720

February 4, 2010

Mr. John J. Joyce
Chief Executive Officer
Ambient Corporation
79 Chapel Street
Newton, Massachusetts 02458

RE: Ambient Corporation
Form 10-K for the year ended December 31, 2008
Filed March 11, 2009
File No. 0-23723

Forms 10-Q for fiscal quarter ended September 30, 2009
Filed November 16, 2009

Dear Mr. Joyce:

We have completed our review of your Form 10-K and related filings and do not, at this time, have any further comments.

Sincerely,

Carlos Pachó
for

Larry Spigel
Assistant Director