



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 6010

September 12, 2008

William J. Schmidt  
Chief Financial Officer  
Ibis Technology Corporation  
32 Cherry Hill Drive  
Danvers, MA 01923

**Re: Ibis Technology Corporation**  
**Form 10-K for the Fiscal Year ended December 31, 2007**  
**Filed May 28, 2008**  
**File No. 000-23150**

Dear Mr. Schmidt:

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

Sincerely,

Angela Crane  
Branch Chief