February 8, 2011

VIA EDGAR AND FACSIMILE

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, DC 20549-3561

Attention: Russell Mancuso, Branch Chief

Joseph McCann, Division of Corporation Finance

Mary Beth Breslin, Senior Attorney Brian Cascio, Accounting Branch Chief

Martin James, Senior Assistant Chief Accountant Jeanne Bennett, Division of Corporation Finance

Re: Fluidigm Corporation

Registration Statement on Form S-1 (File No. 333-170965)

Ladies and Gentlemen:

In accordance with Rule 461 under the Securities Act of 1933, as amended, Deutsche Bank Securities Inc. and Piper Jaffray & Co., as representatives of the several underwriters (the "Representatives") hereby join in the request of Fluidigm Corporation (the "Company") with respect to the effective time of the above referenced Registration Statement so that it will become effective Wednesday, February 9, 2011, at 5:00 p.m. Eastern Time, or as soon thereafter as practicable.

In connection with this acceleration request and pursuant to Rule 460 under the Securities Act of 1933, as amended, please be advised that, during the period from January 28, 2011 to the date of this letter, we have effected approximately the following distribution of copies of the preliminary prospectus, dated January 28, 2011:

To Whom Distributed Institutions, Brokers and Other

Number of Copies 1,950

The Representatives confirm on behalf of themselves and the several underwriters that they have complied with the requirements of Rule 15c2-8 of the Securities Exchange Act of 1934, as amended.

[Signature page follows]

Sincerely yours,

DEUTSCHE BANK SECURITIES INC. PIPER JAFFRAY & CO.

As Representatives of the Several Underwriters

DEUTSCHE BANK SECURITIES INC.

By: /s/ Michael Brophy
Name: Michael Brophy
Title: Associate

PIPER JAFFRAY & CO.

By: /s/ Sean Cessna
Name: Sean Cessna
Title: Principal

[Signature Page to Underwriter Acceleration Request]