

MICROFLUIDICS INTERNATIONAL CORP  
Form RW  
March 17, 2009

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VIA EDGAR AND TELEFAX (202-772-9218)

Securities and Exchange Commission

Division of Corporate Finance

100 F Street, N.E.

Washington, DC 20549-6010

Attn: Geoffrey Kruczek, Esq. and Mary Beth Breslin, Esq.

Re: Registration Statement on Form S-3, as amended  
File No. 333-156066 (the Registration Statement )

Ladies and Gentlemen:

Pursuant to Rule 477(a) of the Securities Act of 1933, as amended, Microfluidics International Corporation, a Delaware corporation (the Company ), hereby respectfully applies for the withdrawal of the above-referenced Registration Statement and requests that the Commission consent thereto.

The Registration Statement was filed by the Company on behalf of a securityholder pursuant to the terms of a registration rights agreement between the Company and that securityholder. The parties have subsequently amended the terms of that agreement to eliminate the Company's obligation to file a registration statement at this time.

No securities have been or will be sold under the Registration Statement. The Registration Statement was not declared effective by the Commission.

We appreciate your assistance in this matter. If you have any questions, please do not hesitate to contact the undersigned or Jeffrey M. Stoler, Esq. of McCarter & English, LLP.

Very truly yours,

MICROFLUIDICS INTERNATIONAL CORPORATION

By: /s/ Brian E LeClair  
Brian E. LeClair  
Executive Vice-President and Chief Financial Officer

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