UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-A/A

(Amendment No. 1)

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

FLUIDIGM CORPORATION

(Exact name of Registrant as specified in its Charter)

Delaware (State or other jurisdiction of incorporation or organization)

77-0513190 (I.R.S. Employer Identification Number)

7000 Shoreline Court, Suite 100 South San Francisco, California

(Address of principal executive offices)

94080 (Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class to be so registered

Name of each exchange on which each class is to be registered

Preferred Share Purchase Rights

The NASDAQ Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective upon filing pursuant to General Instruction A.(c), check the following box. \boxtimes

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A. (d), check the following box. \Box

Securities Act registration statement file number to which this form relates: Not applicable

Securities to be registered pursuant to Section 12(g) of the Act:

None

EXPLANATORY NOTE

This Form 8-A/A is filed by Fluidigm Corporation (the "Company") to reflect the expiration of the preferred share purchase rights registered on the Form 8-A filed by the Company on November 22, 2016.

Item 1. Description of Registrant's Securities to Be Registered.

On August 1, 2017, the Company held its 2017 annual meeting of stockholders (the "Annual Meeting") and did not submit the Tax Benefit Preservation Plan (the "Plan"), dated as of November 21, 2016, between the Company and Computershare Inc. as rights agent, to a stockholder vote at the Annual Meeting. Pursuant to the terms of the Plan, as of 5:00 p.m., New York City time, on August 1, 2017, all of the preferred share purchase rights distributed to holders of the Company's common stock pursuant to the Plan expired and the Plan effectively terminated as of such time.

The foregoing description of the Plan does not purport to be complete and is qualified in its entirety by reference to the Plan.

Item 2. Exhibits.

Exhibit No.	Description of Exhibit
3.1	Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed by the Company with the Securities and Exchange Commission on November 22, 2016).
4.1	Tax Benefit Preservation Plan, dated as of November 21, 2016, between the Company and Computershare Inc. as rights agent (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by the Company with the Securities and Exchange Commission on November 22, 2016).

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized.

FLUIDIGM CORPORATION

August 2, 2017 By: /s/ Vikram Jog

Name: Vikram Jog

Title: Chief Financial Officer

EXHIBIT INDEX

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