

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

SCHEDULE 13D

**Under the Securities Exchange Act of 1934
(Initial Filing)***

MICROFLUIDICS INTERNATIONAL CORPORATION

(Name of Issuer)

Common Stock, \$0.01 par value per share
(Title of Class of Securities)

595074105
(CUSIP Number)

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(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

February 25, 2011
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. o

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 595074105

1	NAMES OF REPORTING PERSONS. I.R.S. Identification Nos. of above persons (entities only) IDEX Corporation (I.R.S. Identification No. 36-3555336)	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) WC, BK	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 11,133,621 (1)
	8	SHARED VOTING POWER N/A
	9	SOLE DISPOSITIVE POWER 11,133,621 (1)
	10	SHARED DISPOSITIVE POWER N/A
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 11,133,621 (1)	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 76.1%(2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO	

- (1) Amount includes 6,950,731 shares owned by Nano Merger Sub, Inc. as of February 25, 2011 and 4,192,890 shares that may be acquired by IDEX Corporation, as of February 25, 2011, through the conversion of the Debenture (as defined in Item 4). As Nano Merger Sub, Inc. is a direct, wholly-owned subsidiary of IDEX Corporation, IDEX Corporation may be deemed to have beneficial ownership over the shares owned by Nano Merger Sub, Inc.
- (2) Calculation based on (a) 10,430,647 shares outstanding as of February 24, 2011, which figure is based on information provided by Microfluidics International Corporation's transfer agent, plus (b) 4,192,890 shares that may be acquired by IDEX Corporation, as of February 25, 2011, through the conversion of the Debenture.

CUSIP No. 595074105

1	NAMES OF REPORTING PERSONS. I.R.S. Identification Nos. of above persons (entities only) Nano Merger Sub, Inc. (I.R.S. Identification No. 27-4499248)	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) WC, BK	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="radio"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 6,950,731 (1)
	8	SHARED VOTING POWER N/A
	9	SOLE DISPOSITIVE POWER 6,950,731 (1)
	10	SHARED DISPOSITIVE POWER N/A
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 6,950,731 (1)	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="radio"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 66.5%(2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO	

(1) Amount consists of 6,950,731 shares owned by Nano Merger Sub, Inc. as of February 25, 2011.

(2) Calculation based on 10,430,647 shares outstanding as of February 24, 2011, which figure is based on information provided by Microfluidics International Corporation's transfer agent.

Item 1. Security and Issuer

The title and class of securities to which this statement on Schedule 13D (this “Statement”) relates is the shares of common stock (the “Shares”), par value \$0.01 per share, of Microfluidics International Corporation (the “Company”). The Company’s principal executive offices are located at 30 Ossipee Road, Newton, Massachusetts 02464.

Item 2. Identity and Background

The persons filing this statement are (i) IDEX Corporation, a Delaware corporation (“IDEX”), and (ii) IDEX’s direct, wholly-owned subsidiary, Nano Merger Sub, Inc., a Delaware corporation (the “Purchaser”). IDEX and the Purchaser are sometimes referred to collectively as the “Reporting Persons,” and each as a “Reporting Person.”

The principal executive offices of each of IDEX and the Purchaser are located at 1925 West Field Court, Suite 200, Lake Forest, IL 60045. IDEX is an applied solutions company specializing in fluid and metering technologies, health and science technologies, dispensing equipment, and fire, safety and other diversified products built to its customers’ exacting specifications. Its products are sold in niche markets to a wide range of industries throughout the world. IDEX shares are traded on the New York Stock Exchange and Chicago Stock Exchange under the symbol “IEX”. The Purchaser was formed solely for the purposes of engaging in the transactions contemplated by the Merger Agreement (as defined in Item 4).

The name, citizenship, principal occupation or employment and address of each executive officer and director of IDEX and the Purchaser are set forth in Schedule I hereto, which is incorporated herein by reference.

During the last five years, neither of the Reporting Persons nor, to the best knowledge of the Reporting Persons, any person named on Schedule I hereto, has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors), and to the best knowledge of the Reporting Persons, none of the persons named on Schedule I is or has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction, nor, as a result of such proceeding, was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

The Purchaser acquired the Shares pursuant to the Offer (as defined in Item 4) for approximately \$10.0 million. IDEX acquired the Debenture (as defined in Item 4) pursuant to the Agreement Concerning Debenture (as defined in Item 4) for approximately \$4.2 million. The Purchaser and IDEX obtained funding for such acquisitions from a combination of cash on hand and funds available under IDEX’s existing domestic, multi-currency bank revolving credit facility.

The information set forth or incorporated in Item 4 is incorporated herein by reference.

Item 4. Purpose of Transaction

On January 10, 2011, IDEX, the Purchaser and the Company entered into an Agreement and Plan of Merger (the “Merger Agreement”). In accordance with the Merger Agreement, on January 25, 2011, the Purchaser commenced a cash tender offer (the “Offer”) to purchase all outstanding Shares at a price of \$1.35 per share, net to the seller in cash without interest but subject to any applicable tax withholding, upon the terms and subject to the conditions set forth in the Offer to Purchase, dated as of January 25, 2011 (as amended, the “Offer to Purchase”), incorporated by reference to Exhibit (a)(1)(A) of the Tender Offer Statement on Schedule TO filed by IDEX and the Purchaser with the Securities and Exchange Commission (the “SEC”) on January 25, 2011 (as amended, the “Schedule TO”), and the related Letter of Transmittal, dated as of January 25, 2011, incorporated by reference to Exhibit (a)(1)(B) of the Schedule TO.

The information set forth in the sections of the Offer to Purchase entitled “Summary Term Sheet,” “Introduction,” “The Offer — 6. Price Range of the Shares; Dividends on the Shares,” “The Offer — 7. Effect of the Offer on the Market for the Shares; Over-the-Counter Bulletin Board Quotation; Exchange Act Registration; Margin Regulations,” “The Offer — 11. Background of the Offer; Past Contacts; Negotiations and Transactions,” “The Offer — 12. Purpose of the Offer; Plans for Microfluidics; Other Matters,” and “The Offer — 13. The Merger Agreement; Other Agreements” is incorporated herein by reference.

The initial offering period expired at 12:00 midnight, New York City time, on Thursday, February 24, 2011. Based upon information provided by Registrar and Transfer Company, the depository for the Offer (the “Depository”), 6,940,731 Shares (including certain Shares tendered to the depository pursuant to the Offer’s guaranteed delivery procedure) were validly tendered and not properly withdrawn prior to the expiration of the initial offering period, representing approximately 66.5% of the outstanding Shares. On February 25, 2011, the Purchaser accepted for payment all Shares validly tendered and not properly withdrawn during the initial offering period and promptly made payment for such Shares in accordance with the terms of the Offer and applicable law. Also on February 25, 2011, in accordance with the Merger Agreement, Messrs. Michael C. Ferrara, Stephen J. Robinson, and Leo Pierre Roy resigned as directors of the Company and the remaining Company directors increased the size of the Company’s Board of Directors to seven members and appointed Messrs. Kevin G. Hostetler, Lawrence D. Kingsley, Heath A. Mitts, and Andrew K. Silvernail, all of whom are employed by IDEX, as directors to fill the vacancies created by such resignations and increase in Board size.

Also on February 25, 2011, in accordance with the Merger Agreement, IDEX announced that the Purchaser had commenced a subsequent offering period to acquire all of the remaining untendered Shares to permit stockholders who had not yet tendered their Shares the opportunity to do so. During the subsequent offering period, holders of Shares who did not previously tender their Shares in the Offer will receive the same consideration payable to stockholders who have previously tendered, \$1.35 per Share, net to the seller in cash without interest but subject to any applicable tax withholding. During the subsequent offering period, the Purchaser will immediately accept for payment and promptly pay for properly tendered Shares as such Shares are tendered. The subsequent offering period, as extended upon the initial expiration of the subsequent offering period on Thursday, March 3, 2011, will expire at 5:00 p.m., New York City time, on Thursday, March 10, 2011.

On November 14, 2008, the Company entered into a Convertible Debenture and Warrant Purchase Agreement, as amended, with Global Strategic Partners, LLC (“GSP”) (a wholly-owned subsidiary of Abraxis BioScience, LLC (“Abraxis”)) pursuant to which, among other things, the Company issued a debenture (the “Debenture”) in the total principal amount of \$5,000,000 and bearing interest at 9.0% per annum payable quarterly in arrears. The Debenture is convertible, in whole or in part, on any of the maturity date, the date that any interest payment is due, or the date on which a “change of control” (as defined therein) occurs, into Shares at a price of \$1.25 per share.

In connection with, and as a condition to, the execution of the Merger Agreement, IDEX, the Purchaser, GSP, Abraxis and American Stock Transfer and Trust Company, LLC, in its capacity as custodian, entered into an Agreement Concerning Debenture, dated January 10, 2011 (the "Agreement Concerning Debenture"), pursuant to which, immediately following the expiration of the initial offering period, on February 25, 2011, IDEX purchased the Debenture for approximately \$4.2 million, and the Debenture was assigned and transferred to IDEX. As of February 25, 2011, the Debenture was convertible into approximately 4,192,890 Shares, representing, after giving effect to such conversion, approximately 28.7% of the outstanding Shares.

The foregoing summaries of the Debenture and the Agreement Concerning Debenture and the transactions contemplated thereby do not purport to be complete and are qualified in their entirety by the complete text of the Debenture and the Agreement Concerning Debenture, which are incorporated herein by reference to Exhibit (e)(10) and Exhibit (e)(20) to the Schedule 14D-9 of the Company filed with the SEC on January 25, 2011, as amended.

Depending on market conditions and other factors, IDEX or the Purchaser may acquire additional Shares as they may deem appropriate, whether in open market purchases, privately negotiated transactions or otherwise. IDEX and the Purchaser also reserve the right to dispose of some or all of such Shares in the open market, in privately negotiated transactions to third parties or otherwise.

If, following the expiration of the subsequent offering period, or upon exercise of the "top-up" option pursuant to the Merger Agreement, IDEX owns 90% or more of the aggregate number of Shares outstanding, then IDEX intends to complete the acquisition of the Company through a "short-form" merger as soon as practicable in accordance with applicable provisions of Delaware law that authorize the completion of the merger without a vote or meeting of stockholders of the Company. If the Purchaser is not able to consummate a "short-form" merger, it intends to seek approval of the merger by a vote of the Company's stockholders at a duly held meeting, where, as a result of the Purchaser's acquisition of Shares in the Offer or otherwise, the Purchaser will be able to approve the merger without the affirmative vote of any other stockholder.

As a result of the merger, the Company will become a wholly-owned subsidiary of IDEX. The registration of the Shares under the Securities Exchange Act of 1934, as amended, will be terminated and the Shares will cease to be quoted on the Over-the-Counter Bulletin Board. In the merger, each Share will be cancelled and converted (other than Shares held by IDEX, the Purchaser, the Company or any of their respective subsidiaries and Shares held by holders who properly exercise their appraisal rights under applicable Delaware law) into the right to receive \$1.35 per Share, net to the holder in cash, without interest but subject to any applicable tax withholding. The summary of certain provisions of the Merger Agreement in this Schedule 13D is qualified in its entirety by reference to the Merger Agreement itself, which is attached as Exhibit 1 hereto and is incorporated herein by reference.

Other than as described in this Statement, IDEX currently has no plans or proposals which relate to, or may result in, any of the matters listed in Items 4(a)-(j) of the General Instructions to Schedule 13D.

Item 5. Interest in Securities of the Issuer

(a)-(b) As a result of the purchase of (1) the Shares during the initial offering period and the subsequent offering period and (2) the Debenture pursuant to the Agreement Concerning Debenture, as of February 25, 2011, IDEX beneficially owns a total of 11,133,621 Shares, representing approximately 76.1% of the Shares outstanding (after giving effect to the conversion of the Debenture), and the Purchaser beneficially owns a total of 6,950,731 Shares, representing approximately 66.5% of the Shares outstanding.

The Reporting Persons have the power to vote or direct the voting, and to dispose or direct the disposition of all of the Shares beneficially owned. As the Purchaser is a direct, wholly-owned subsidiary of IDEX, IDEX may be deemed to have beneficial ownership over the Shares owned by the Purchaser.

(c) The information set forth or incorporated in Item 4 is incorporated herein by reference.

(d) Not applicable.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Except as set forth in Item 4, neither of the Reporting Persons nor, to the best knowledge of the Reporting Persons, any person named on Schedule I hereto, has any contracts, arrangements, understandings or relationships (legal or otherwise) with any other person with respect to any securities of the Company or its subsidiaries.

Item 7. Material to Be Filed as Exhibits

1. Agreement and Plan of Merger, dated as of January 10, 2011, by and among IDEX, the Purchaser and the Company (incorporated by reference to Exhibit (d)(1) to the Current Report on Form 8-K filed by the Company with the SEC on January 11, 2011).
 2. Offer to Purchase, dated as of January 25, 2011 (incorporated by reference to Exhibit (a)(1)(A) to the Schedule TO filed by IDEX and the Purchaser with the SEC on January 25, 2011, as amended).
 3. Letter of Transmittal, dated as of January 25, 2011 (incorporated by reference to Exhibit (a)(1)(B) to the Schedule TO filed by IDEX and the Purchaser with the SEC on January 25, 2011, as amended).
 4. Debenture issued by the Company to GSP, dated as of November 14, 2008, as amended (incorporated herein by reference to Exhibit (e)(10) to the Schedule 14D-9 filed by the Company with the SEC on January 25, 2011, as amended).
 5. Agreement Concerning Debenture, dated as of January 10, 2011, by and among IDEX, the Purchaser, GSP, Abraxis and American Stock Transfer and Trust Company, LLC (incorporated herein by reference to Exhibit (e)(20) to the Schedule 14D-9 filed by the Company with the SEC on January 25, 2011, as amended).
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Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this Statement is true, complete and correct.

Date: March 7, 2011

IDEX Corporation

By: /s/ Frank J. Notaro _____

Frank J. Notaro
Vice President, General Counsel and Secretary

Nano Merger Sub, Inc.

By: /s/ Frank J. Notaro _____

Frank J. Notaro
President

Schedule I

IDEX

The names of the directors and executive officers of IDEX and their present principal occupations or employment and material employment history for the past five years are set forth below. Unless otherwise indicated, each director and executive officer has been so employed or held such position for a period in excess of five years. All directors and executive officers listed below are citizens of the United States. The business address of each of the directors and executive officers of IDEX is c/o IDEX Corporation, 1925 West Field Court, Suite 200, Lake Forest, IL 60045.

<u>Name</u>	<u>Position</u>
Lawrence D. Kingsley	Chairman of the Board and Chief Executive Officer
Bradley J. Bell	Director
Ruby R. Chandy	Director
William M. Cook	Director
Frank S. Hermance	Director
Gregory F. Milzcik	Director
Ernest J. Mrozek	Director
Neil A. Springer	Director
Michael T. Tokarz	Director
Heath A. Mitts	Vice President and Chief Financial Officer
Kevin G. Hostetler	Vice President, Group Executive Fluid and Metering Technologies
John L. McMurray	Vice President-Group Executive Process Technologies
Harold Morgan	Vice President-Human Resources
Frank J. Notaro	Vice President-General Counsel and Secretary
Daniel J. Salliotte	Vice President-Strategy and Business Development
Andrew K. Silvernail	Vice President, Group Executive Health and Science Technologies and Global Dispensing
Michael J. Yates	Vice President and Chief Accounting Officer

Lawrence D. Kingsley. Mr. Kingsley has been Chairman of the Board since April 2006. He was appointed to the position of President and Chief Executive Officer in March 2005. Mr. Kingsley is a director of The Cooper Industries, PLC.

Bradley J. Bell. Mr. Bell served as Executive Vice President and Chief Financial Officer of Nalco Company from prior to 2006 until his retirement in 2010. Mr. Bell is a director of Compass Minerals International, Inc.

Ruby R. Chandy. Ms. Chandy has been Chief Marketing Officer of The Dow Chemical Company since 2010. Ms. Chandy served as Chief Marketing Officer for Rohm and Hass Company from 2007 to 2009, and as Vice President of Marketing and Commercial Excellence, and in various operating roles, at Thermo Fisher Scientific, from prior to 2006 to 2007.

William M. Cook. Mr. Cook has been Chairman, President and Chief Executive Officer of Donaldson Company, Incorporated since prior to 2006. Mr. Cook is a director of Donaldson Company, Incorporated and Valspar Corporation.

Frank S. Hermance. Mr. Hermance has been Chairman and Chief Executive Officer of AMETEK, Inc. since prior to 2006. Mr. Hermance is a director of AMETEK, Inc.

Gregory F. Milzcik. Mr. Milzcik has been President and Chief Executive Officer of Barnes Group Inc. since October 2006. In 2006, prior to his appointment as President, Mr. Milzcik served as Executive Vice President and Chief Operating Officer, Barnes Group Inc. Mr. Milzcik is a director of Barnes Group Inc.

Ernest J. Mrozek. Mr. Mrozek served as Vice Chairman and Chief Financial Officer of The ServiceMaster Company from November 2006 to his retirement in March 2008 and was President and Chief Financial Officer of ServiceMaster from January 2004 to November 2006. Mr. Mrozek is a director of G&K Services, Inc.

Neil A. Springer. Mr. Springer has been Managing Director of Springer & Associates, L.L.C. since prior to 2006. Mr. Springer is a director of Mueller Water Products, Inc.

Michael T. Tokarz. Mr. Tokarz has been a member of The Tokarz Group L.L.C. since prior to 2006. Mr. Tokarz is a director of Conseco, Inc., MVC Capital, Inc., Mueller Water Products, Inc., and Walter Industries, Inc.

Heath A. Mitts. Mr. Mitts has been Vice President and Chief Financial Officer of the Company since March 1, 2011. From September 2005 to February 2011, Mr. Mitts was Vice President-Corporate Finance.

Kevin G. Hostetler. Mr. Hostetler has been Vice President-Group Executive Fluid & Metering Technologies since February 2010. Mr. Hostetler joined IDEX in July 2005 as President of the Energy Group and was appointed Vice President, Group Executive and President Energy and Water and IDEX Asia in December 2008.

John L. McMurray. Mr. McMurray has served as Vice President-Corporate since February 2010 with responsibilities for operational excellence, supply chain and environment and health and safety. Prior to that, Mr. McMurray was Vice President-Group Executive from August 2003.

Harold Morgan. Mr. Morgan has been Vice President-Human Resources of the Company since June 2008. From February 2003 to June 2008, Mr. Morgan was Senior Vice President and Chief Administrative Officer for Bally Total Fitness Corporation.

Frank J. Notaro. Mr. Notaro has served as Vice President-General Counsel and Secretary since March 1998.

Daniel J. Salliotte. Mr. Salliotte has been Vice President-Strategy and Business Development since October 2004.

Andrew K. Silvernail. Mr. Silvernail has been Vice President-Group Executive Health & Science Technologies, Global Dispensing and Fire & Safety/Diversified Products since January 2011. From February 2010 to December 2010, Mr. Silvernail was Vice President-Group Executive Health & Sciences Technologies and Global Dispensing. Mr. Silvernail joined IDEX in January 2009 as Vice President-Group Executive Health & Science Technologies. Prior to joining IDEX, Mr. Silvernail served as Group President at Rexnord Industries from April 2005 to August 2008.

Michael J. Yates. Mr. Yates has been Vice-President and Chief Accounting Officer since February 2010. Mr. Yates was hired as Vice President-Controller in October 2005.

PURCHASER

The name of the sole director and executive officer of the Purchaser and his present principal occupation or employment and material employment history for the past five years are set forth below. The individual listed below is a citizen of the United States. His business address is c/o IDEX Corporation, 1925 West Field Court, Suite 200, Lake Forest, IL 60045.

<u>Name</u>	<u>Position</u>
Frank J. Notaro	President, Vice President Secretary, Treasurer and Sole Director

Frank J. Notaro. Mr. Notaro has served as Vice President-General Counsel and Secretary of IDEX since March 1998.