SEQUENOM INC Form SC 13D/A May 30, 2008

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 2)*

Sequenom, Inc.
(Name of Issuer)

Common Stock, par value \$0.001 per share
(Title of Class of Securities)
817337108
(CUSIP Number)
Kevin M. Royer, Esq.
Siemens Corporation
153 East 53 Street, 56th Floor
New York, NY 10022
(212) 258-4151

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications) May 28, 2008 (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 which 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(b) 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).

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SCHEDULE 13D

CUSIP No. 859823106

NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Siemens Venture Capital GmbH

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) þ

SEC USE ONLY

3

SOURCE OF FUNDS

4

OO

CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) $\,$

O

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Federal Republic of Germany

SOLE VOTING POWER

7

NUMBER OF 2,920,342

SHARES SHARED VOTING POWER

BENEFICIALLY 8

OWNED BY 0

EACH SOLE DISPOSITIVE POWER

REPORTING 9

PERSON 2,920,342

WITH SHARED DISPOSITIVE POWER

10

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,920,342

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

11

12

6.43%

TYPE OF REPORTING PERSON

14

CO

2

SCHEDULE 13D

CUSIP No. 859823106

NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Siemens Beteiligungen Inland GmbH

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) þ

SEC USE ONLY

3

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4

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CUSIP No. 859823106

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Siemens Aktiengesellschaft

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) þ

SEC USE ONLY

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CO

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Item 5. Interest in Securities of the Issuer SIGNATURE

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This Amendment No. 2 (the <u>Amendment No. 2</u>) amends and supplements Item 5 of the Statement of Beneficial Ownership on Schedule 13D originally filed with the Securities and Exchange Commission on June 12, 2006, as amended by Amendment No. 1 filed on May 21, 2008 (together, the <u>Schedule 13D</u>) relating to the beneficial ownership by Siemens Venture Capital GmbH (<u>Siemens Venture Capital</u>), Siemens Beteiligungen Inland GmbH (<u>Siemens Beteiligungen</u>) and Siemens Aktiengesellschaft (<u>Siemens AG</u>) (each, individually, a <u>Reporting Person</u> and collectively the <u>Reporting Persons</u>) of common stock, par value \$0.001 per share (the <u>Common S</u>tock) of Sequenom, Inc., a Delaware corporation with principal executive offices at 3595 John Hopkins Court, San Diego, California 92121. (the <u>Issuer</u>). Unless specifically amended in this Amendment No. 2, the disclosures set forth in the Schedule 13D shall remain unchanged.

Item 5. Interest in Securities of the Issuer

(a)-(b) As of May 28, 2008, Siemens Venture Capital beneficially owns 2,920,342 shares of Common Stock, representing approximately 6.43% of shares of Common Stock outstanding as of April 14, 2008. Siemens Venture Capital has sole voting and dispositive power with respect to such shares. For purposes of this Statement, Siemens AG and Siemens Beteiligungen are also reported as having voting and dispositive power over such shares by virtue of their respective control over Siemens Venture Capital. Siemens Beteiligungen, as Siemens Venture Capital s sole shareholder, and Siemens AG, as Siemens Beteiligungen s sole shareholder, may be deemed to own all such shares.

To the best of the Reporting Persons knowledge, none of the persons set forth in Exhibit B to Amendment No. 1 filed on May 21, 2008 beneficially owns any shares of Common Stock.

(c) Except as set forth below, there were no purchases by any of the Reporting Persons, or to the best of the Reporting Persons knowledge, any of the persons set forth in Exhibit B to Amendment No. 1 filed on May 21, 2008, since May 21, 2008:

Reporting Person who effected the Transaction	Date of Transaction	Number of Shares	Price Per Share	Type of Transaction
Siemens Venture Capital GmbH	May 21, 2008	258,221	\$7.4036	Open Market Sale
Siemens Venture	May 22, 2008	19,348	\$ 7.417	Open Market Sale
Capital GmbH Siemens Venture	May 27, 2008	61,800	\$7.4193	Open Market Sale
Capital GmbH Siemens Venture	May 28, 2008	125,400	\$7.4454	Open Market Sale
Capital GmbH		,	<i>+</i>	or and a surface surface

- (d) Not applicable.
- (e) Not applicable.

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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 with respect to Siemens Venture Capital GmbH is true, complete and correct. Dated: May 30, 2008

SIEMENS VENTURE CAPITAL GMBH

By: /s/ DR. RALF SCHNELL

Name: Dr. Ralf Schnell

Title: CEO

By: /s/ THOMAS KOLBINGER

Name: Thomas Kolbinger

Title: CFO

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After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement with respect to Siemens Beteiligungen Inland GmbH is true, complete and correct.

Dated: May 30, 2008

SIEMENS BETEILIGUNGEN INLAND GMBH

By: /s/ CHRISTIAN HOMERING

Name: Christian Homering Title: Managing Director

By: /s/ DR. OTMAR N. SCHMITT

Name: Dr. Otmar N. Schmitt Title: Managing Director

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

Dated: May 30, 2008

SIEMENS AKTIENGESELLSCHAFT

By: /s/ DOMINIK ASAM

Name: Dominik Asam

Title: Managing Director and CEO

Siemens Financial Services GmbH

By: /s/ SOLMS U. WITTIG

Name: Solms U. Wittig

Title: General Counsel Corporate and SFS

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