LAUKIEN FRANK H Form SC 13G/A February 09, 2006

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G/A

Under the Securities Exchange Act of 1934 (Amendment No. 5)*

Bruker BioSciences Corporation

(Name of Issuer)

Common Stock

(Title of Class of Securities)

116794108

(CUSIP Number)

December 31, 2005

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- o Rule 13d-1(b)
- o Rule 13d-1(c)
- ý Rule 13d-1(d)

*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 the disclosures provided in a prior cover page.

The information required in 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. 116794108

12.

| 1. | Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only) Frank H. Laukien | | |
|------------------------------|--|--------------------------------------|---|
| 2. | Check the Appropriate Box (a) (b) | if a Member of a Group (Se o o | ee Instructions) |
| 3. | SEC Use Only | | |
| 4. | Citizenship or Place of Orga Germany (Permanent U.S. re | | |
| Number of | 5. | | Sole Voting Power Approximately 15,057,072 shares |
| Shares Beneficially Owned by | 6. | | Shared Voting Power 0 |
| Each Reporting Person With | 7. | | Sole Dispositive Power Approximately 14,071,978 shares |
| | 8. | | Shared Dispositive Power 985,094 shares |
| 9. | Aggregate Amount Beneficially Owned by Each Reporting Person Approximately 15,057,072 shares | | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o | | |
| 11. | Percent of Class Represented 16.8% | d by Amount in Row (9) | |

Type of Reporting Person (See Instructions) IN

2

| Item 1. | | | |
|---------|---------------------------------|--|--|
| | (a) | Name of Issuer | |
| | | Bruker BioSciences Corporati | |
| | (b) | Address of Issuer s Principal | Executive Offices |
| | | | |
| | | 40 Manning Road | |
| | | D'II ' MA 01001 | |
| | | Billerica, MA 01821 | |
| Item 2. | | | |
| | (a) | Name of Person Filing | |
| | , | Frank H. Laukien | |
| | (b) | Address of Principal Business | Office or, if none, Residence |
| | | 40 Manning Road | |
| | | | |
| | | Billerica, MA 01821 | |
| | (c) | Citizenship | |
| | (4) | Germany (U.S. resident) | |
| | (d) | Title of Class of Securities Common Stock, par value \$0. | 01 ner share |
| | (e) | CUSIP Number | or per share. |
| | (0) | 116794108 | |
| | | | |
| | | | |
| Item 3. | If this statement is fil | ed pursuant to §§240.13d-1(b) o | or 240.13d-2(b) or (c), check whether the person filing is a: |
| Item 3. | | - | Broker or dealer registered under section 15 of the Act (15 U.S.C. |
| Item 3. | (a) | 0 | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). |
| Item 3. | | - | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). |
| Item 3. | (a) | 0 | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 |
| Item 3. | (a) (b) (c) | 0 0 0 | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). |
| Item 3. | (a) (b) | 0 | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). Investment company registered under section 8 of the Investment |
| Item 3. | (a) (b) (c) | 0 0 0 | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). |
| Item 3. | (a) (b) (c) (d) | 0 0 0 0 | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). |
| Item 3. | (a) (b) (c) (d) (e) (f) | 0 0 0 0 | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E); An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); |
| Item 3. | (a) (b) (c) (d) (e) | 0 0 0 0 | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E); An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); A parent holding company or control person in accordance with § |
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| Item 3. | (a) (b) (c) (d) (e) (f) (g) (h) | 0 0 0 0 0 0 | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E); An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G); A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813); |
| Item 3. | (a) (b) (c) (d) (e) (f) (g) | 0 0 0 0 0 | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E); An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G); A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813); A church plan that is excluded from the definition of an investment |
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| Item 3. | (a) (b) (c) (d) (e) (f) (g) (h) | | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E); An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G); A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813); A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3); |
| Item 3. | (a) (b) (c) (d) (e) (f) (g) (h) | | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E); An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G); A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813); A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3); Group, in accordance with §240.13d-1(b)(1)(ii)(J). |
| Item 3. | (a) (b) (c) (d) (e) (f) (g) (h) | | Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E); An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G); A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813); A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3); Group, in accordance with §240.13d-1(b)(1)(ii)(J). Not applicable. |

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

15,057,072 shares

(b) Percent of class:

16.8%

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote

15,057,072 shares

(ii) Shared power to vote or to direct the vote

0

(iii) Sole power to dispose or to direct the disposition of

14,071,978 shares

(iv) Shared power to dispose or to direct the disposition of

985,094 shares

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following o.

Not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding

Company or Control Person

Not applicable.

Item 8. Identification and Classification of Members of the Group

Not applicable.

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certification

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 is true, complete and correct.

February 9, 2006. Date

/s/ Frank H. Laukien Signature

Frank H. Laukien Name/Title

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Signature 5