

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): June 3, 2004

ENZO BIOCHEM, INC.
(Exact Name of Registrant as Specified in Charter)

New York	001-09974	13-2866202
(State or Other Jurisdiction of Incorporation or Organization)	(Commission File Number)	(I.R.S. Employer Identification No.)

60 Executive Boulevard, Farmingdale, New York 11735
(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (631) 755-5500

NOT APPLICABLE

(Former name or former address, if changed since last report)

ITEM 5. OTHER EVENTS AND REQUIRED FD DISCLOSURE.

On June 2, 2004, the Registrant issued a press release announcing the institution of a lawsuit against it and one of its subsidiaries. A copy of the press release is furnished as Exhibit 99.1 to this Current Report.

The information in this Current Report and the exhibits attached hereto are being "furnished" hereunder and shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), nor shall they be deemed incorporated by reference into any filings made by the Registrant with the Securities and Exchange Commission under the Exchange Act or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filings.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934,

the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: June 3, 2004

Enzo Biochem, Inc.

By: /s/ Barry Weiner

Name: Barry Weiner
Title: President

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EXHIBIT INDEX

EXHIBIT -----	DESCRIPTION -----
99.1	Registrant's press release dated June 3, 2004 announcing the institution of a lawsuit against the Company and one of its subsidiaries.*

* Furnished herewith.

ENZO BIOCHEM, INC.
527 MADISON AVENUE
NEW YORK, NY 10022

FOR IMMEDIATE RELEASE

ENZO REJECTS ROCHE SETTLEMENT OFFER
ROCHE RESPONDS WITH LAWSUIT

FARMINGDALE, NY, June 3, 2004 - Enzo Biochem, Inc. (NYSE:ENZ) announced that after it rejected as inadequate the latest cash offer by Roche Diagnostics GmbH to settle Enzo's claims for, INTER ALIA, alleged breach of contract and misappropriation of Enzo's assets, Roche Diagnostics GmbH and Roche Molecular Systems, Inc. (collectively "Roche") filed suit in the U.S. District Court of the Southern District of New York against Enzo Biochem, Inc. and Enzo Life Sciences, Inc. (collectively "Enzo"). This action reflects, in Enzo's view, Roche's concern that certain products and technologies that were funneled by Affymetrix, Inc. to Roche rightfully belong to Enzo under the Enzo-Affymetrix Agreement.

The complaint seeks declaratory judgment (i) of patent invalidity with respect to Enzo's 4,994,373 patent, (ii) of no breach by Roche of its 1994 Distribution and Supply Agreement with Enzo (the "1994 Agreement"), (iii) that non-payment by Roche to Enzo for certain sales of Roche products does not constitute a breach of the 1994 Agreement, and (iv) that Enzo's claims of ownership to proprietary inventions, technology and products developed by Roche are without basis. In addition the suit claims tortious interference and unfair competition. The patent that is the subject of this action is also the subject of an existing lawsuit by Enzo against Affymetrix pending in the same court.

Enzo will vigorously protect its assets and rights and will respond appropriately to this action.

ABOUT ENZO

Enzo Biochem is engaged in the research, development and manufacture of innovative health care products based on molecular biology and genetic engineering techniques, and in providing diagnostic services to the medical community. The Company's proprietary labeling and detection products for gene sequencing and genetic analysis, with approximately 200 patents worldwide, are sold to the life sciences market throughout the world. The Company's therapeutic division is in various stages of clinical evaluation of its proprietary gene medicine for HIV-1 infection and its proprietary immune regulation medicines for hepatitis B and hepatitis C infection and for Crohn's Disease. The Company also holds a patent covering a method and materials for correcting point mutations or small insertions or deletions of genetic material that would allow for editing and correcting certain abnormalities in genes. For more information visit our website WWW.ENZO.COM.

EXCEPT FOR HISTORICAL INFORMATION, THE MATTERS DISCUSSED IN THIS NEWS RELEASE MAY BE CONSIDERED "FORWARD-LOOKING" STATEMENTS WITHIN THE MEANING OF SECTION 27A OF THE SECURITIES ACT OF 1933, AS AMENDED AND SECTION 21E OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. SUCH STATEMENTS INCLUDE DECLARATIONS REGARDING THE INTENT, BELIEF OR CURRENT EXPECTATIONS OF THE COMPANY AND ITS MANAGEMENT. INVESTORS ARE CAUTIONED THAT ANY SUCH FORWARD-LOOKING STATEMENTS ARE NOT GUARANTEES OF FUTURE PERFORMANCE AND INVOLVE A NUMBER OF RISKS AND UNCERTAINTIES THAT COULD MATERIALLY AFFECT ACTUAL RESULTS. THE COMPANY DISCLAIMS ANY OBLIGATIONS TO UPDATE ANY FORWARD-LOOKING STATEMENT AS A RESULT OF DEVELOPMENTS OCCURRING AFTER THE DATE OF THIS PRESS RELEASE.

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CONTACT:

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