## UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

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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): July 28, 2004

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

New York001-0997413-2866202(State or Other Jurisdiction of<br/>Incorporation or Organization)(Commission File Number)(I.R.S. Employer<br/>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

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

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ITEM 5. OTHER EVENTS AND REQUIRED FD DISCLOSURE

On July 28, 2004, the Registrant issued a press release reporting a legal proceeding development. 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.

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# 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: July 28, 2004

Enzo Biochem, Inc.

By: /s/ Barry Weiner Name: Barry Weiner Title: President

# EXHIBIT INDEX

EXHIBIT	DESCRIPTION					
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99.1 Registrant's press release dated July 28, 2004 reporting a legal proceeding development.\*

\* Furnished herewith.

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[GRAPHIC OMITTED]

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

### ENZO BIOCHEM REPORTS COURT RULING

FOR IMMEDIATE RELEASE

NEW YORK, NY, July 28, 2004 - Enzo Biochem, Inc. (NYSE:ENZ), announced that it will file an appeal to the U.S. Court of Appeals for the Federal Circuit of yesterday's decision of the U.S. District Court for the Southern District of New York (Hon. Alvin K. Hellerstein) granting summary judgment in a patent infringement suit by the Company against Gen-Probe, Inc., and Becton Dickinson and Company, charging infringement of the Company's U.S. Patent No.4,900,659 directed to probes for the detection of the bacterium that causes gonorrhea.

The district court granted the defendants' summary judgment motion of invalidity of the '659 patent based on the "on-sale bar," finding that a transaction between the Company and Ortho Diagnostics Systems occurring in December 1984 under an agreement between them dating from 1982, and which was subsequently terminated, was an invalidating commercial sale made more than one year before the patent application's filing date (January 1986).

The Company's counsel, Kenyon & Kenyon, stated that the decision was in error. "We respectfully disagree with the Court's decision and believe it to be erroneous. It is contrary to Federal Circuit precedent and resolved contested factual issues that should have been heard at trial and not found on summary judgment," said attorney Richard DeLucia of that firm. "I am highly confident that this decision should be reversed on appeal."

This is the second time that the district court judge granted summary judgment of invalidity against Enzo in this case. The first such ruling, invalidating the patent for lack of written description, was made in January 2001 and reversed by the U.S. Court of Appeals for the Federal Circuit in July 2002, which resulted in the case being returned to the district court for further proceedings.

There can be no assurance that the Company will be successful in the appeal, however even if not, the Company said that it does not receive any material revenue from this patent and the decision will have no impact on its ongoing activities or current revenue stream.

# 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 over 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. For: Enzo Biochem, Inc. Steve Anreder, 212-532-3232

or

Ed Lewis, CEOcast, Inc., 212-732-4300

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