

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): August 23, 2006

Enzo Biochem, Inc.

(Exact Name of Registrant as Specified in Its Charter)

New York

(State or Other Jurisdiction of Incorporation)

001-09974

13-2866202

(Commission File Number)

(IRS Employer Identification No.)

60 Executive Boulevard  
Farmingdale, New York

11735

(Address of Principal Executive Offices)

(Zip Code)

(631) 755-5500

(Registrant's Telephone Number, Including Area Code)

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01. Other Events.

On August 23, 2006, Enzo Biochem, Inc., a New York corporation (the "Company"), issued a press release announcing that the United States Patent and Trademark Office has declared two patent interferences designating an allowable Enzo Life Sciences patent application against patents held by Chiron Diagnostics and Princeton University for nucleic acid detection. The press release issued by the Company announcing the foregoing is included as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated by reference in its entirety into this Item 8.01.

Item 9.01. Financial Statements and Exhibits.

(c) Exhibits.

Exhibit No. Description

99.1 Press Release of Enzo Biochem, Inc., dated August 23, 2006.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ENZO BIOCHEM, INC.

Date: August 23, 2006

By: /s/ Elazar Rabbani

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Dr. Elazar Rabbani  
Chairman of the Board and Chief  
Executive Officer

EXHIBIT INDEX

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Exhibit No. - -----	Description -----
99.1	Press Release of Enzo Biochem, Inc., dated August 23, 2006.

[OBJECT OMITTED]]

News  
Release  
-----Enzo Biochem, Inc.  
527 Madison Avenue  
New York, NY 10022

For Immediate Release

ENZO NAMED SENIOR PARTY IN U.S. PATENT &  
TRADEMARK OFFICE PROCEEDING  
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## Enzo Granted Interferences for Key Nucleic Acid Detection Technology

FARMINGDALE, NY, August 23, 2006 - Enzo Biochem Inc. (NYSE:ENZ) announced today that the United States Patent and Trademark Office has declared two patent interferences designating an allowable Enzo Life Sciences patent application against patents held by Chiron Diagnostics and Princeton University for nucleic acid detection. Bayer Healthcare LLC, of Tarrytown, NY, is the real party in interest to Chiron's patent. Enzo Life Sciences is the senior party in both interferences.

This nucleic acid technology is the basis for several significant products in clinical diagnostics and in the life sciences field which are currently marketed or licensed by various commercial companies. According to trade reports, industry-wide annual sales of diagnostic products utilizing this technology are estimated to exceed \$100 million in the United States alone. Among these products are the "VERSANT(R) Branched DNA (bDNA) Assays" sold by the Diagnostics Division of Bayer HealthCare. VERSANT(R) is a trademark of Bayer HealthCare L.L.C.

The invention which is the subject of the interferences uses a bridging probe or strand to find a nucleic acid of interest, such as a gene or pathogen sequence. A signaling probe or strand is hybridized to the bridging probe or strand, and provides for detection including an amplified signal. In this way the invention provides a powerful means for generating and delivering robust signal amplification. Signal amplification can be used instead of target amplification without compromising the sensitivity of the assay.

An interference is a proceeding instituted by the U.S. Patent and Trademark Office when an issued patent and an allowed patent application claim essentially the same invention. The purpose of the proceeding is to determine who is the first inventor and who will be granted patent rights to the invention. In the two interferences, Enzo is the senior party since its original 1983 patent filing pre-dates those of Chiron and Princeton. Princeton University is the junior party in one interference based upon two patents it holds, U.S.

Patent Nos. 4,882,269 and 5,424,188, which were originally filed in 1985. Chiron Diagnostics is the junior party in the other interference based upon its U.S. Patent No. 5,124,246, originally filed in 1987. Enzo's European patent application was published in December 1984 before either of the Chiron or Princeton application filings. The proceedings will be before the Board of Patent Appeals and Interferences, and presided over by an Administrative Patent Judge.

- more -

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In addition to the claims in the interferences for nucleic acid detection, Enzo's patent application includes other methods and compositions useful in immunoassays and other ligand based technologies.

## About Enzo

Enzo Biochem and its subsidiaries (the Company) are 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 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, uveitis, Crohn's disease, and for NASH and its associated metabolic syndrome. Pre-clinical research is being conducted on several candidate compounds aimed at providing new mineral and organic bone, including technology that could provide therapy for osteoporosis and fractures, among other applications. 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. The Company owns or

licenses over 200 patents worldwide. For more information visit our website [www.enzo.com](http://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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Contacts;

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