UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 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): January 31, 2008

ALEXION PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

000-27756 (Commission File Number) 13-3648318 (I.R.S. Employer Identification No.)

352 Knotter Drive, Cheshire, Connecticut 06410 (Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (203) 272-2596

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 January 31, 2008, SB2, Inc. filed a civil action against Alexion Pharmaceuticals, Inc. in the U.S. District Court for the Northern District of California. SB2, Inc. claims willful infringement by Alexion of SB2, Inc. patents. SB2, Inc. seeks, among other things, monetary damages and equitable relief.

Signature

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: February 4, 2008

ALEXION PHARMACEUTICALS, INC.

By: /s/ Thomas I. H. Dubin

Name: Thomas I. H. Dubin Title: Senior Vice President and General Counsel