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): August 18, 2006

A.P. Pharma, Inc.

(Exact name of registrant as specified in its charter)

000-16109 -----(Commission File Number)

Delaware

94-2875566 - ----------(State or other jurisdiction (I.R.S. Employer of incorporation) Identification No.)

123 Saginaw Drive Redwood City, CA 94063

(Address of principal executive offices, with zip code)

(650) 366-2626

-----(Registrant's telephone number, including area code)

N/A

_____ (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 Γ Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the 1
- Exchange Act (17 CFR 240.14a-12) Pre-commencement communications pursuant to Rule 14d-2(b) 1
- under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c)] Γ under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Entry into a Material Definitive Agreement

On August 18, 2006, A.P. Pharma, Inc. (the "Company") has entered into a Third Amendment to Rights Agreement with Computershare Trust Company, N.A. (the "Amendment"). The Amendment extends the final expiration date of the original Rights Agreement dated August 19, 1996 until December 31, 2006 and addresses certain other changes to comply with updated legal requirements. A copy of the Amendment is attached as Exhibit 10.Z to this Form 8-K.

Item 9.01 Financial Statements and Exhibits. (c) Exhibits Exhibit 10.Z Third Amendment to Rights Agreement between the Company and Computershare Trust Company, N.A., dated August 18, 2006.

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.

A.P. PHARMA, INC.

Date: August 21, 2006 Gordon Sangster Chief Financial Officer

A.P. PHARMA, INC.

Third Amendment to Rights Agreement

THIS AMENDMENT TO RIGHTS AGREEMENT ("Amendment") is made as of August 18, 2006 by and between A.P. Pharma, a Delaware corporation (the "Company"), as successor in interest to Advanced Polymer Systems, Inc., a Delaware corporation (the "Predecessor") and Computershare Trust Company, N.A., as successor in interest to the First National Bank of Boston, a Massachusetts corporation (the "Rights Agent").

Background

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A. The Predecessor and the Rights Agent have entered into a Rights Agreement, dated as of August 19, 1996 (the "Rights Agreement"). Capitalized terms used in this Amendment without definition shall have the meanings given to them in the Rights Agreement.

B. The parties now wish to amend the Rights Agreement as set forth below.

C. This Amendment has been approved by the Board of Directors of the Company and the individual members of the Board of Directors of the Company in their capacities as Continuing Directors (as defined in the Rights Agreement).

THE PARTIES AGREE AS FOLLOWS:

Amendment of the Rights Agreement.

 Section 1(k) of the Rights Agreement is hereby amended and restated in its entirety to read as follows:
 "Final Expiration Date" shall mean the Close of Business on December 31, 2006.

b. All references in the Rights Agreement to "Continuing Directors" shall be deemed references to the Board of Directors of the Company and all power and authority vested in the Continuing Directors is hereby vested in the Board of Directors of the Company.

2. No Other Amendment. Except as modified by this Amendment, the Rights Agreement shall remain in full force and effect without any modification. By executing this Amendment below, the Company certifies that this Amendment has been executed and delivered in compliance with the terms of Section 27 of the Rights Agreement. This Amendment shall be deemed an amendment to the Rights Agreement and shall become effective when executed and delivered by the Company and the Rights Agent as provided under Section 27 of the Rights Agreement.

3. Effect of Amendment. Except as and to the extent expressly modified by this Amendment, the Rights Agreement and the exhibits thereto, shall remain in full force and effect in all respects. In the event of a conflict or inconsistency between this Amendment and the Rights Agreement and the exhibits thereto, the provisions of this Amendment shall govern.

4. Counterparts. This Amendment may be executed in several counterparts, each of which shall constitute an original and all of which, when taken together, shall constitute one agreement.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment to Rights Agreement as of the date and year first above written.

A.P. PHARMA, INC.

Name: Gordon Sangster Title: Chief Financial Officer Computershare Trust Company, N.A., as Rights Agent

By: /s/ Carol Mulvey-Eori Name: Carol Mulvey-Eori Title: Managing Director