

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

January 11, 2011

Mr. Michael Piraino Senior Vice President and Chief Financial Officer Accelrys, Inc. 10188 Telesis Court Suite 100 San Diego, California 92121 via fax (858) 799-5475

Re: Accelrys, Inc.

Form 10-K for the Fiscal Year Ended March 31, 2010

Filed May 28, 2010

Form 8-K filed July 2, 2010

File No. 0-27188

Dear Mr. Piraino:

We have reviewed your letter dated December 14, 2010 in connection with the above-referenced filings and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to this comment, we may have additional comments. Unless otherwise noted, where prior comments are referred to they refer to our letter dated November 30, 2010.

Form 8-K filed July 2, 2010

1. We note your response to prior comment 5 where you indicate that because the company was not required to file financial statements of Symyx with the Form 8-K, you made the determination that pro forma financial statements were also not required to be filed in the Form 8-K. While the financial statements of Symyx, which were included in your Form S-4 were substantially the same as those that would be required pursuant to Item 9.01(a) of Form 8-K, the pro forma financial statements included in the Form S-4 filing were not. Accordingly, please amend the Form 8-K to include the pro forma financial information required by Item 9.01(b) of Form 8-K and Article 11 of Regulation S-X.

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You may contact Megan Akst, Staff Accountant, at (202) 551-3407 if you have any questions regarding comments on the financial statements and related matters. If you need further assistance, you may contact me at (202) 551-3499.

Sincerely,

Kathleen Collins Accounting Branch Chief