

Mail Stop 6010

August 7, 2007

Richard Gabriel
Chief Executive Officer and President
DNAPrint Genomics, Inc.
1621 West University Parkway
Sarasota, FL 34243

**Re: DNAPrint Genomics, Inc.
Registration Statement on Form SB-2, Amendment 3
Filed August 2, 2007
File No. 333-141991**

Dear Mr. Gabriel:

We have reviewed your filing and have the following comment. Where indicated, we think you should revise your document in response to the comment. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. After reviewing your response, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

FORM SB-2

1. We note the reference to a July 20, 2007 agreement with Dutchess. Please file this agreement as an exhibit. We may have further comments after seeing the agreement.

* * *

As appropriate, please amend your registration statement in response to this comment. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your response to our comment and provides any requested information. Detailed cover letters greatly

Richard Gabriel
DNAPrint Genomics, Inc.
August 7, 2007
Page 2

facilitate our review. Please understand that we may have additional comments after reviewing your amendment and response to our comment.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Please contact Greg Belliston at (202) 551-3861, Suzanne Hayes at (202) 551-3675, or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: Michael T. Cronin
Johnson, Pope, Bokor, Ruppel & Burns, LLP
911 Chestnut Street
Clearwater, FL 33756