

# PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
<b>CONVEYING PARTY DATA</b>											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>JAY D. KEASLING</td> <td>03/18/2009</td> </tr> <tr> <td>FARNAZ F. NOWROOZI</td> <td>03/23/2009</td> </tr> <tr> <td>DOUGLAS J. PITERA</td> <td>03/16/2009</td> </tr> <tr> <td>JENNIFER ANTHONY</td> <td>07/15/2009</td> </tr> </tbody> </table>		Name	Execution Date	JAY D. KEASLING	03/18/2009	FARNAZ F. NOWROOZI	03/23/2009	DOUGLAS J. PITERA	03/16/2009	JENNIFER ANTHONY	07/15/2009
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>The Regents of the University of California</td> </tr> <tr> <td>Street Address:</td> <td>1111 Franklin Street, Twelfth Floor</td> </tr> <tr> <td>City:</td> <td>Oakland</td> </tr> <tr> <td>State/Country:</td> <td>CALIFORNIA</td> </tr> <tr> <td>Postal Code:</td> <td>94607-5200</td> </tr> </table>		Name:	The Regents of the University of California	Street Address:	1111 Franklin Street, Twelfth Floor	City:	Oakland	State/Country:	CALIFORNIA	Postal Code:	94607-5200
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<b>CORRESPONDENCE DATA</b>											
Fax Number: (650)327-3231 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 6503273400 Email: cisneros@bozpat.com Correspondent Name: Paula A. Borden Address Line 1: Bozicevic Field and Francis LLP Address Line 2: 1900 University Avenue, Suite 200 Address Line 4: East Palo Alto, CALIFORNIA 94303											
ATTORNEY DOCKET NUMBER:	BERK-059										
NAME OF SUBMITTER:	Paula A. Borden										
Total Attachments: 3											

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**PATENT**  
**REEL: 023650 FRAME: 0969**

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## ASSIGNMENT

U.C. Case No. B06-146; UC-1100

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

- |                      |                       |
|----------------------|-----------------------|
| 1. JAY D. KEASLING   | 2. FARNAZ E. NOWROOZI |
| 3. DOUGLAS J. PITERA | 4. JENNIFER ANTHONY   |

hereby sell(s), assign(s) and transfer(s) to ASSIGNEE, The Regents of the University of California, a California Corporation, having its statewide administrative offices located 1111 Franklin Street, Twelfth Floor, Oakland, CA 94607-5200, and the successors, assigns and legal representatives of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the invention entitled:

### "PRODUCTION OF ISOPRENOIDS AND ISOPRENOID PRECURSORS"

and which is found in

- (a) \_\_\_\_\_ U.S. Provisional Application filed herewith and listing the above named persons as inventors
- (b) \_\_\_\_\_ U.S. Patent Application filed herewith and listing the above named persons as inventors
- (c) X \_\_\_\_\_ U.S. Application Serial No. or PCT International Application No. US2007/020790 designating the United States, filed on September 25, 2007
- (d) \_\_\_\_\_ U.S. Patent No., issued


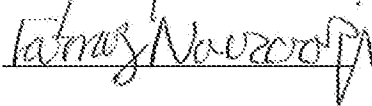
and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension, conversion to 35 USC 111(a) or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further covenant(s) that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR(S) and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

AND the ASSIGNOR(S) request(s) the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, The Regents of the University of California.

executed this      Signature of Inventor(s)

- |   |  |
|---|--|
| 1) <u>18 March 2009</u><br>Date                      Year | <br>JAY D. KEASLING    |
| 2) <u>13 March 2009</u><br>Date                      Year | <br>FARNAZ E. NOWROOZI |
| 3) _____<br>Date                      Year                | _____<br>DOUGLAS J. PITERA   |
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and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension, conversion to 35 USC III(a) or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

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| 2) | _____<br>Date                      Year                       | _____<br>FARNAZ F. NOWROOZI                   |  |
| 3) | <u>March 16</u> <u>2009</u><br>Date                      Year | <u>Douglas J. Pitera</u><br>DOUGLAS J. PITERA |  |
| 4) | _____<br>Date                      Year                       | _____<br>JENNIFER ANTHONY                     |  |

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| 3) | _____<br>Date                      Year             | _____<br>DOUGLAS J. PITERA                  |
| 4) | <u>07, 15, 09</u><br>Date                      Year | <u>Jennifer Anthony</u><br>JENNIFER ANTHONY |

**PATENT**

**RECORDED: 12/14/2009**

**REEL: 023650 FRAME: 0973**