

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Neil Reginald Beer</td><td>10/05/2011</td></tr><tr><td>William J. Bennett</td><td>10/06/2011</td></tr><tr><td>James M. Frank</td><td>10/06/2011</td></tr><tr><td>Joshua R. Deotte</td><td>10/06/2011</td></tr><tr><td>Christopher Spadaccini</td><td>10/04/2011</td></tr></tbody></table>		Name	Execution Date	Neil Reginald Beer	10/05/2011	William J. Bennett	10/06/2011	James M. Frank	10/06/2011	Joshua R. Deotte	10/06/2011	Christopher Spadaccini	10/04/2011
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RECEIVING PARTY DATA													
<table border="1"><tr><td>Name:</td><td>Lawrence Livermore National Security, LLC</td></tr><tr><td>Street Address:</td><td>Lawrence Livermore National Laboratory</td></tr><tr><td>Internal Address:</td><td>7000 East Avenue, L-703</td></tr><tr><td>City:</td><td>Livermore</td></tr><tr><td>State/Country:</td><td>CALIFORNIA</td></tr><tr><td>Postal Code:</td><td>94551-9234</td></tr></table>		Name:	Lawrence Livermore National Security, LLC	Street Address:	Lawrence Livermore National Laboratory	Internal Address:	7000 East Avenue, L-703	City:	Livermore	State/Country:	CALIFORNIA	Postal Code:	94551-9234
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PROPERTY NUMBERS Total: 1													
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>13267767</td></tr></tbody></table>		Property Type	Number	Application Number:	13267767								
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Application Number:	13267767												
CORRESPONDENCE DATA													
Fax Number: (650)938-5200													
Phone: 415-875-2405													
Email: dchevalier@fenwick.com													
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>													
Correspondent Name: Christian J. Ullsperger													
Address Line 1: 801 California Street													
Address Line 4: Mountain View, CALIFORNIA 94041													
ATTORNEY DOCKET NUMBER:	26303-18606 US												

501684027

PATENT
REEL: 027028 FRAME: 0505

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NAME OF SUBMITTER:

Christian J. Ullsperger

Total Attachments: 6

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PATENT

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ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to **Lawrence Livermore National Security, LLC**, having a place of business at Lawrence Livermore National Laboratory, 7000 East Avenue, L-703, Livermore, California, 94551-9234 ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following provisional application filed under 35 U.S.C. § 111(b), non-provisional application filed under 35 U.S.C. § 111(a), international application filed according to the Patent Cooperation Treaty (PCT), or U.S. national phase application filed under 35 U.S.C. § 371 ("APPLICATION"):

- Application No. 13/267,767, entitled "**Methods And Compositions For Rapid Thermal Cycling**" filed on October 6, 2011, which claims priority from the following provisional applications: U.S. Provisional Application No. 61/390,383, filed October 6, 2010, U.S. Provisional Application No. 61/390,415, filed October 6, 2010, U.S. Provisional Application No. 61/390,425, filed October 6, 2010, U.S. Provisional Application No. 61/390,433, filed October 6, 2010, U.S. Provisional Application No. 61/390,441, filed October 6, 2010, U.S. Provisional Application No. 61/390,452, filed October 6, 2010, and U.S. Provisional Application No. 61/512,393, filed July 27, 2011.

2. The entire worldwide right, title, and interest in and to:
(a) the APPLICATION; (b) all applications claiming priority from the APPLICATION;
(c) all provisional, utility, divisional, continuation, substitute, renewal, reissue, and other applications related thereto which have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) which may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful

Title: Methods And Compositions For Rapid Thermal Cycling
Filed: October 6, 2011
Application No.: 13/267,767

acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

Name and Signature



Neil Reginald Beer

Date of Signature

10 | 5, 2011

Name and Signature

William J. Benett

Date of Signature

, 2011

Name and Signature

James M. Frank

Date of Signature

, 2011

Name and Signature

Joshua R. Deotte

Date of Signature

, 2011

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<hr/>	<hr/>
Neil Reginald Beer	, 2011

Name and Signature	Date of Signature
 William J. Bennett	10/6/ , 2011

Name and Signature	Date of Signature
<hr/>	<hr/>
James M. Frank	, 2011

Name and Signature	Date of Signature
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Joshua R. Deotte	, 2011

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Name and Signature	Date of Signature
Neil Reginald Beer	, 2011

Name and Signature <hr/> <hr/> William J. Benett	Date of Signature <hr/> <hr/> , 2011
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Name and Signature	Date of Signature
 James M. Frank	October 6, 2011

Name and Signature <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> Joshua R. Deotte	Date of Signature <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <div style="text-align: right;">, 2011</div>
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<u>Name and Signature</u>	<u>Date of Signature</u>
<u>Neil Reginald Beer</u>	<u>, 2011</u>

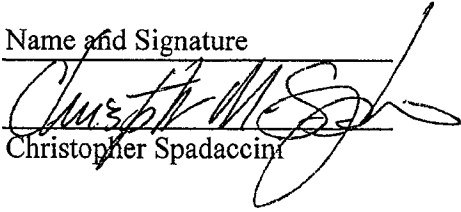
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<u>William J. Benett</u>	<u>, 2011</u>

<u>Name and Signature</u>	<u>Date of Signature</u>
<u>James M. Frank</u>	<u>, 2011</u>

<u>Name and Signature</u>	<u>Date of Signature</u>
<u>Joshua R. Deotte</u>	<u>October 6, 2011</u>

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Filed: October 6, 2011
Application No.: 13/267,767

Name and Signature


Christopher Spadaccini

Date of Signature

10/4/11, 2011

Attorney Docket No: IL-12328 (26303-18606)

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RECORDED: 10/06/2011

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