

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the removing Kambiz Vafai; corrected execution date as 11/07/08 for Neil Reginald Beer previously recorded on Reel 022245 Frame 0422. Assignor(s) hereby confirms the Assignment.
CONVEYING PARTY DATA	
Name	Execution Date
Neil Reginald Beer	11/07/2008
RECEIVING PARTY DATA	
Name:	Lawrence Livermore National Security, LLC
Street Address:	2300 First Street, Suite 204
City:	Livermore
State/Country:	CALIFORNIA
Postal Code:	94550
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	12270348
CORRESPONDENCE DATA	
Fax Number:	
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Email:	yu25@llnl.gov
Correspondent Name:	Mark H. Lough
Address Line 1:	7000 East Ave.,
Address Line 2:	L-703
Address Line 4:	Livermore, CALIFORNIA 94550
ATTORNEY DOCKET NUMBER:	IL-11903 CORRECTIVE
NAME OF SUBMITTER:	Mark H. Lough
Signature:	/Mark H. Lough/
Date:	09/26/2013

CH \$40.00 12270348

Total Attachments: 4

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PATENT ASSIGNMENT

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02/11/2009
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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>11/10/2008</td></tr><tr><td>Kambiz Vafai</td><td>11/10/2008</td></tr></tbody></table>		Name	Execution Date	Neil Reginald Beer	11/10/2008	Kambiz Vafai	11/10/2008						
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Neil Reginald Beer	11/10/2008												
Kambiz Vafai	11/10/2008												
RECEIVING PARTY DATA													
<table border="1"><tr><td>Name:</td><td>Lawrence Livermore National Security, LLC</td></tr><tr><td>Street Address:</td><td>7000 East Avenue</td></tr><tr><td>Internal Address:</td><td>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>94550</td></tr></table>		Name:	Lawrence Livermore National Security, LLC	Street Address:	7000 East Avenue	Internal Address:	L-703	City:	Livermore	State/Country:	CALIFORNIA	Postal Code:	94550
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Property Type	Number												
Application Number:	12270348												
CORRESPONDENCE DATA													
Fax Number: (925)423-2231 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Phone: 925/424-6897													
Email: nugent8@llnl.gov													
Correspondent Name: Eddie E. Scott/LLNS													
Address Line 1: 7000 East Avenue													
Address Line 2: L-703													
Address Line 4: Livermore, CALIFORNIA 94550													
ATTORNEY DOCKET NUMBER:	IL-11903												
NAME OF SUBMITTER:	Eddie E. Scott												
Total Attachments: 5 source=IL_11903_Recordation_Assignment_filed_02_11_09#page1.tif													

CH \$40.00 12270348

TO: EDDIE E. SCOTT/LLNS COMPANY: 7000 EAST AVENUE

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ASSIGNMENT

LLNL Case No.: IL-11903

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

- | | |
|------------------------------------|------------------------------|
| 1. <u>Neil Reginald Beer (USA)</u> | 2. <u>Kambiz Vafai (USA)</u> |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |
| 9. _____ | 10. _____ |

hereby sells, assigns and transfers to ASSIGNEE, Lawrence Livermore National Security, LLC, a Delaware Corporation, having its administrative offices located at Sunset Plaza Building C, 1658 Holmes St., Livermore, CA 94551 and the successors, assigns and legal representative 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:

RAPID MICROFLUIDIC THERMAL CYCLER FOR NUCLEIC ACID AMPLIFICATION

and which is found in

- ☒ U.S. patent application executed on 11/10/2008, entitled as above and listing the above named persons as inventors
- ☒ U.S. patent application serial no. 12/270,348, filed on 11/13/2008
- ☐ 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 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 covenants 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 covenants 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 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) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, Lawrence Livermore National Security, LLC.

executed this

11/7/2008

Date

Signature of Inventor(s)

Neil Reginald Beer
Neil Reginald Beer

executed this

11/10/03

Date

Signature of Inventor(s)

Kambiz Vafai