FORM PTO-1595	SHELL U.S. DEPARTMENT OF COM
1-31-92	Patent and Trademark
101907	
	Please record the attached original documents or copy thereof.
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Stewart K. Griffiths; Robert H. Nilson; Brad S. Mattson; Stephen E. Savas	Sandia Corporation Mattson Technology , Inc
Additional name(s) of conveying party(ies) attached?	7011 East Avenue 3550 West Warren Avenu
Yes 🕅 No	Livermore, CA 94550 Fremont, CA 94538
3. Nature of conveyance:	
🛛 Assignment 🗌 Merger	Additional name(s) & address(es) attached?
 Security Agreement Change of Name Other 	🗌 Yes 🖾 No
Execution Date: <u>10/29/98; 10/29/98; 12/8/98; 11/30/98</u>	
4. Application number(s) or patent number(s):	∇ the execution date of the application is: 40°
If this document is being filed together with a new application	on, the execution date of the application is: -70
A. Patent Application No.(s): 09/641,461	B. Patent No.(s):
	ers attached? 🗌 Yes 🛛 No
 Name and address of party to whom correspondence concerning document should be mailed: 	 Total number of applications and patents involved: [1]
Michael J. Murphy Internal Address: SR 1-2	7. Total fee (37 CFR 3.41)
Wilson Sonsini Goodrich & Rosati	Enclosed
650 Page Mill Road Palo Alto, CA 94304-1050	Authorized to be charged to deposit account
	8. Deposit account number: <u>23-2415</u> (Attorney Docket No.: 14912.774)
DO NOT U	ISE THIS SPACE
9. Statement and signature. To the best of my knowledge and belief, the foregoing in, the original document.	formation is true and correct and any attached copy is a true co
Michael J. Murphy	202
Name of Person Signing	Signature Date
Total nu	mber of pages including cover sheet, attachments, and document

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ASSIGNMENT

WHEREAS, the undersigned,

Stewart K. Griffiths 122 Alice Court Danville, CA 94526-2449	Brad S. Mattson 19251 Black Road Los Gatos, CA 95030
Citizenship: US	Citizenship: US
and	and
Robert H. Nilson 2239 Ruddy Duck Court Cardiss, CA 92007	Stephen E. Savas 1357 Pear St., Apt. G Alameda, CA 94501
Citizenship: US	Citizenship: US

hereinafter termed "Inventors", have invented certain new and useful improvements in

Method and Apparatus for Thermal Processing of Semiconductor Substrates

and have filed an application for a United States patent disclosing and identifying the above invention on August 26, 1998, as Application No. 09/140,614 (hereinafter termed "application");

WHEREAS, Stewart K. Griffiths and Robert H. Nilson are employees of Sandia Corporation and Brad S. Mattson and Stephen E. Savas are employees of Mattson Technology, Inc.;

WHEREAS, Steward K. Griffiths and Robert H. Nilson made their contributions with respect to the above invention in the course of work authorized by Contract DE-AC04-94AL85000 between Sandia Corporation and the United States Department of Energy;

WHEREAS, the Government of the United States, as represented by the U.S. Department of Energy has granted a waiver of Government rights in the above-identified invention to Sandia Corporation under Class Waiver W(C)93-012, effective October 1, 1993;

WHEREAS, Sandia Corporation ("Sandia") having a place of business at 7011 East Avenue, Livermore, California 94550, and Mattson Technology, Inc. ("Mattson"), a corporation of the State of California, having a place of business at 3550 West Warren Avenue, Fremont, California 94538 (jointly hereinafter termed "Assignee") have entered into that certain License Agreement Number 98-C00668 dated June 26, 1998 providing for joint ownership of the above invention; and

WHEREAS, Sandia and Mattson are desirous of jointly acquiring, in accordance with License Agreement Number 98-C00668, the entire right, title and interest in and to said application and the invention

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disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered jointly or severally by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventors to have been received in full from said Assignee:

1. Said Inventors do hereby sell, assign, transfer and convey jointly unto Sandia and Mattson, in accordance with License Agreement Number 98-C00668, the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any applications; and (d) in and to each and every reissue or extensions of any of said patents.

Said Inventors hereby jointly and severally covenant and agree to cooperate with said 2. Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation will be coordinated by the respective employer, either Sandia or Mattson, of each Inventor as set forth in License Agreement Number 98-C00668. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute. divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventors in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventors, their respective heirs, legal representatives and assigns.

4. Said Inventors hereby jointly and severally warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

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PATENT REEL: 012330 FRAME: 0272 IN WITNESS WHEREOF, said Inventors have executed and delivered this instrument to said Assignee as of the dates written below.



State of California County of Abneda

On Och 30, 1998, before me, Andrea C (aporicci personally appeared Stewart K. Griffiths

personally known to me or proved to me on the basis of satisfactory evidence, to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

oucer

(Notary Public)

Robert H. Nilson

Date



State of California

County of Alaneda

On <u>DCI.3D</u>, 1998, before me, <u>Andrea C Capun</u>CCI personally appeared <u>Robert H. Nilson</u>,

personally known to me or proved to me on the basis of satisfactory evidence, to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

(Notary Public)

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Brad S. Mattson

Date LISA NALETT Commission = 1150525 Notary Public - California Alameda County My Comm. Expires Aug 8, 200

Stephen E. Savas



State of California

County of Alameda

On <u>13/8/92</u>, 1998, before me, <u>215e</u> <u>NATE</u> Tpersonally appeared <u>Brad S. Mattson</u> personally known to me or proved to me on the basis of

satisfactory evidence, to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

(Notary Public)

State of California

State of California , County of Mameda , On <u>11/30/98</u>, 1998, before me, <u>Lisa NAJett</u>, personally appeared <u>Stephen E. Savas</u> personally known to me or proved to me on the basis of

satisfactory evidence, to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

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RECORDED: 11/28/2001