Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Henner Meinhold	08/28/2008
Dan M. Doble	09/02/2008
Stephen Lau	09/03/2008
Vince Wilson	09/03/2008
Easwar Srinivasan	09/03/2008

RECEIVING PARTY DATA

Name:	Novellus Systems, Inc.
Street Address:	3970 North First Street
City:	San Jose
State/Country:	CALIFORNIA
Postal Code:	95134

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12181927

CORRESPONDENCE DATA

Fax Number: (510)663-0920

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Email: djones@wavsip.com

Correspondent Name: Weaver Austin Villeneuve & Sampson LLP

Address Line 1: 500 12th Street, Suite 200
Address Line 4: Oakland, CALIFORNIA 94607

ATTORNEY DOCKET NUMBER:	NOVLP246X1/NVLS-3344C1
NAME OF SUBMITTER:	Cindy H. Shu

Total Attachments: 8

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PATENT REEL: 021507 FRAME: 0589

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> PATENT REEL: 021507 FRAME: 0590

ASSIGNMENT OF PATENT APPLICATION

Whereas I, an undersigned inventor, have invented certain new and useful improvements as set forth in the patent application entitled:

TEMPERATURE CONTROLLED SHOWERHEAD

(Atty. Docket No. NOVLP246X1/NVLS-3344C1), (check one)	
for which I have executed a U.S. patent application on even date herewith. which bears U.S. application No. 12/181,927. (Not accompanying) which is a U.S. provisional application. (Accompanying)	(Accompanying)

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, an undersigned inventor, hereby:

- 1) Sell, assign and transfer to **Novellus Systems, Inc.**, a California corporation having a place of business at 3970 North First Street, San Jose, California 95134 ("ASSIGNEE"), the entire right, title and interest in any and all improvements and inventions disclosed in, applications based upon, and patents granted upon (including foreign patents and the right to claim priority), the above-referenced application.
- 2) Authorize and request the Commissioner of Patents to issue any and all United States Patents resulting from said application or any division, continuation, substitute, renewal, re-examination or reissue thereof to the ASSIGNEE.
- 3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.
- 4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon the inventor, as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I have not entered and will not enter into any assignment, contract, or understanding that conflicts with this assignment.
- 6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.

Signed on the date indicated beside my signature.

Revised 01/02, Assign US Notary

1. Inventor Signature: Post Date: 8/28/2008 Henner Meinhold
State of California)
County of Washington
On this day of August, in the year 2008, before me, Notary Public, personally appeared Henner Meinhold, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal. OFFICIAL SEAL
Notary Signature Tours (In the State of the
2. Inventor Signature: Date:
Dan M. Doble
Dan M. Doble State of Massachusetts) State of Massachusetts) Ss. County of, in the year 2008 before me,
Dan M. Doble State of Massachusetts) County of
State of Massachusetts) County of, in the year 2008 before me,, Notary Public personally appeared Dan Doble, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon
State of Massachusetts) State of Massachusetts) Ss. County of, in the year 2008 before me,, Notary Public personally appeared Dan Doble, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of Massachusetts that the

3. Inventor Signature: <u>Hephin</u> Zan Date: <u>9/3/08</u>		
State of Oregon)		
County of Wathington ss.		
On this 3rd day of Scotenber, in the year 2008 before me, Notary Public personally appeared Stephen Lau, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.		
I certify under PENALTY OF PERJURY under the laws of the State of Oregon that the foregoing paragraph is true and correct.		
WITNESS my hand and official seal. OFFICIAL SEAL NOTARY PUBLIC - OREGON		
Notary Signature James Aug. 18, 2010 Notary Signature		
4. Inventor Signature: Mee Wilson Date: 9-3-08		
State of Oregon)		
County of Weshington ss.		
On this 3rd day of solution, in the year 2008 before me, axis drawn Notary Public personally appeared Vince Wilson, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.		
I certify under PENALTY OF PERJURY under the laws of the State of Oregon that the foregoing paragraph is true and correct.		
WITNESS my hand and official seal. Notary Signature Town Alman Alman Signature Town Alman Alman Signature Town Alman Signature Town Signature Town Alman Signature Town Signature Signatu		

5. Inventor Signature: _	Easwar Srinivasan	Date	: Sept 3rd, 2008
State of Oregon)		
County of Washing	unton }	ss.	
On this 3rd day	of September	, in the year 2008 l	pefore me, inivasan, who proved to me
on the basis of satisfactor	-		
within instrument and ack	mowledged to me that he	/she/they executed the	same in his/her/their
authorized capacity(ies), a	and that by his/her/their s	ignature(s) on the instr	rument the person(s), or the

I certify under PENALTY OF PERJURY under the laws of the State of Oregon that the foregoing paragraph is true and correct.

entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature

OFFICIAL SEAL
LAURA L JOHNSON
NOTARY PUBLIC - OREGON
COMMISSION NO. 408918
MY COMMISSION EXPIRES AUG. 18, 2010

ASSIGNMENT OF PATENT APPLICATION

Whereas I, an undersigned inventor, have invented certain new and useful improvements as set forth in the patent application entitled:

TEMPERATURE CONTROLLED SHOWERHEAD

(Atty. Docket No. 1	NOVLP246X1/NVLS-3344C1), (check one)
⊠ which be	n I have executed a U.S. patent application on even date herewith. (Accompanying ears U.S. application No. 12/181,927. (Not accompanying) a U.S. provisional application. (Accompanying)
•	d valuable consideration, the receipt and sufficiency of which is hereby undersigned inventor, hereby:

- 1) Sell, assign and transfer to **Novellus Systems, Inc.**, a California corporation having a place of business at 3970 North First Street, San Jose, California 95134 ("ASSIGNEE"), the entire right, title and interest in any and all improvements and inventions disclosed in, applications based upon, and patents granted upon (including foreign patents and the right to claim priority), the above-referenced application.
- 2) Authorize and request the Commissioner of Patents to issue any and all United States Patents resulting from said application or any division, continuation, substitute, renewal, re-examination or reissue thereof to the ASSIGNEE.
- 3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.
- 4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon the inventor, as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I have not entered and will not enter into any assignment, contract, or understanding that conflicts with this assignment.
- 6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.

Signed on the date indicated beside my signature.

Revised 01/02, Assign US Notary

Chi no no 8

1. Inventor Signature:	Date:
Henner Meinhold	
State of California)	
County of)	SS.
On this day of Notary Public per	, in the year 2008, before me, sonally appeared Henner Meinhold, who proved
to me on the basis of satisfactory evidence to be the within instrument and acknowledged to me that he/authorized capacity(ies), and that by his/her/their si entity upon behalf of which the person(s) acted, exe	e person(s) whose name(s) is/are subscribed to the she/they executed the same in his/her/their gnature(s) on the instrument the person(s), or the
I certify under PENALTY OF PERJURY under the paragraph is true and correct.	laws of the State of California that the foregoing
WITNESS my hand and official seal.	
Notary Signature	(\$&a\;)
2. Inventor Signature: Dan Doble	Date: 09/02/2008
State of Massachusetts)
County of <u>middlesel</u>)	SS.
On this 2 nd day of September, Notary Public pers the basis of satisfactory evidence to be the person(s instrument and acknowledged to me that he/she/the capacity(ies), and that by his/her/their signature(s) to behalf of which the person(s) acted, executed the in) whose name(s) is/are subscribed to the within y executed the same in his/her/their authorized on the instrument the person(s), or the entity upor
I certify under PENALTY OF PERJURY under the foregoing paragraph is true and correct.	laws of the State of Massachusetts that the
WITNESS my hand and official seal.	
Notary Signature Claine M. How	∠ (SBat)
Norman Ban Don	2 2011

Revised 01/02, Assign US Notary

PATENT REEL: 021507 FRAME: 0596

3. Inventor Signature:	Date:
Stephen Lau	
State of Oregon)	
County of	ss.
On this day of	
on the basis of satisfactory evidence to be the pe within instrument and acknowledged to me that	he/she/they executed the same in his/her/their r signature(s) on the instrument the person(s), or the
I certify under PENALTY OF PERJURY under paragraph is true and correct.	the laws of the State of Oregon that the foregoing
WITNESS my hand and official seal.	(SEAL)
Notary Signature	
4. Inventor Signature:	Date:
Vince Wilson	
State of Oregon)	
County of)	SS.
On this day of	, in the year 2008 before me,,
Notary Public personally appeared Vince Wilson evidence to be the person(s) whose name(s) is/ar acknowledged to me that he/she/they executed the thickney executed the same of the thickney executed t	n, who proved to me on the basis of satisfactory
I certify under PENALTY OF PERJURY under paragraph is true and correct.	the laws of the State of Oregon that the foregoing
WITNESS my hand and official seal.	(88%)/
Notary Signature	

5. Inventor Signature: _	<u> </u>		Date:	
•	Easwar Srinivasan			
State of Oregon)			
County of)	SS.		
on the basis of satisfactor within instrument and ack	y evidence to be the pe nowledged to me that	nally appeared larson(s) whose the helphale help	ear 2008 before me, Easwar Srinivasan, who proname(s) is/are subscribed to ecuted the same in his/her/t n the instrument the person	o the heir
entity upon behalf of which I certify under PENALTY paragraph is true and corre	OF PERJURY under		State of Oregon that the fo	regoing
WITNESS my hand and c	fficial seal.		(SEAL)	
Notary Signature				

Revised 01/02, Assign US Notary

RECORDED: 09/10/2008

PATENT REEL: 021507 FRAME: 0598