Form PTO-1595 (Rev. 01-09) OMB No. 0651-0027 (exp. 02/28/2009)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office	
RECORDATION FO		
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.		
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)	
YANAN ANNIE XIA J. KARL NIERMEYER	Name: ENTEGRIS, INC.	
ROSARIO MOLLICA GREGG T. CONNER	Internal Address:	
Additional name(s) of conveying party(les) attached?		
3. Nature of conveyance/Execution Date(s):	Street Address: <u>129 CONCORD ROAD</u>	
Execution Date(s) 01/20/2011, 01/19/2011 & 01/14/2011		
Assignment Merger	City: BILLERICA	
Security Agreement Change of Name	Gity, Difference	
Joint Research Agreement	State: MA	
Government Interest Assignment	Country: UNITED STATES Zip: 01821-4600	
Executive Order 9424, Confirmatory License		
Other	Additional name(s) & address(es) attached? 🛄 Yes 🗵 No	
4. Application or patent number(s):	document is being filed together with a new application.	
A. Patent Application No.(s)	B. Patent No.(s)	
12/993,791 (ENTG1984-US)		
Additional numbers attached? Yes XNo		
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: <u>1</u>	
Name: SPRINKLE IP LAW GROUP	7. Total fee (37 CFR 1.21(h) & 3.41) \$_40.00	
Internal Address:		
	X Authorized to be charged to deposit account	
Street Address: 1301 W. 25TH STREET,	Enclosed	
SUITE 408	None required (government interest not affecting title)	
City: AUSTIN	8. Payment Information	
State: TX Zip: _78705	_	
Phone Number: (512) 637-9220		
Fax Number: (512) 371-9088	Deposit Account Number: <u>503183</u>	
Email Address:	Authorized User Name: Katharina W. Schuster	
9. Signature: Cathonina	- Guist Feb. 24, 2011	
Signature	Date	
KATHARINA W. SCHUSTER	Total number of pages including cover 9	
Name of Person Signing	sheet, attachments, and documents:	

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

ENTG1984-US

PATENT APPLICATION Serial No. 12/993,791

- 1 of 4 -

ASSIGNMENT

This Assignment is made by Yanan Annie Xia, of Lynnfield, MA; J. Karl Niermeyer, of Tyngsboro, MA; Rosario Mollica, of Wilmington, MA and Gregg T. Conner of Camas, WA ("Assignors").

WHEREAS, Assignors have invented a new and useful invention entitled "GASIFICATION SYSTEMS AND METHODS FOR MAKING BUBBLE FREE SOLUTIONS OF GAS IN LIQUID", for which an application for United States Patent is made, said application being submitted concurrently herewith; and;

WHEREAS, Assignors believe themselves to be the original inventors of the invention including any and all improvements disclosed in said application ("Invention"); and

WHEREAS, the parties desire to have a recordable instrument assigning the entire right, title and interest in and to said Invention, said application, on any subsequently filed divisional, continuation, continuation-in-part, re-examination, reissue or other application for protection ("Applications"), and any patents, invention registrations or other forms of protection ("Patents") that may be granted for said Invention from any Applications in the United States and throughout the world;

NOW, THEREFORE, in accordance with the obligations to assign the Invention and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors hereby sell, assign, and transfer to **Entegris**, **Inc.** having a principal place of business at **129 Concord Road Billerica**, **MA 01821-4600** (hereinafter referred to as "Assignee"), the entire right, title, and interest in and to said Invention, said Applications and any Patents that may be granted for said Invention in the United States and throughout the world, including the right to file foreign applications directly in the name of the Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties, or otherwise.

Assignors agree that, upon request and without further compensation, but at no expense to Assignors, they and/or their legal representatives and assigns will do all lawful acts, including the execution of papers and the giving of testimony, that may be necessary or desirable for obtaining, sustaining, reissuing, or enforcing the Patents in the United States and throughout the world for said Invention, and for perfecting, recording, or maintaining the title of Assignee, its successors and assigns, to said Invention, said application, and any Patents granted for said Invention in the United States and throughout the world.

FEB-25-2011 FRI 02:22 PM

FAX NO.

P. 04

PATENT APPLICATION

Serial No. 12/993,791

ATTORNEY DOCKET ENTG1984-US

- 2 of 4 -

Assignors represent and warrant that they have not granted and will not grant to others any rights inconsistent with the rights granted herein.

Assignors authorize and request the Commissioner for Patents of the United States and of all foreign countries to issue any Patents granted for said Invention, whether on said application or on any subsequently filed divisional, continuation, continuation-in-part, re-examination, reissue or other application, to Assignee, its successors and assigns, as the assignee of the entire interest in said Invention.

IN WITNESS WHEREOF, I hereby set my hand and affix my seal this _____ day of _____, 2011.

Yanan Annie Xia

State of _____) County of _____)

On this day and year aforesaid, before me personally appeared______, known to me to be the person described in and the person who executed the foregoing instrument of assignment and he did acknowledge the same to be his free act and deed.

Signature

Printed Name, Notary Public My commission expires:

FEB-25-2011 FRI 02:22 PM

ATTORNEY DOCKET

ENTG1984-US

FAX NO.

P. 05

PATENT APPLICATION Serial No. 12/993,791

- 3 of 4 -

IN WITNESS WHEREOF, I hereby set my hand and affix my seal this ____ day of . 2011.

J. Karl Niermeyer

State of _____) County of _____) §

On this day and year aforesaid, before me personally appeared_____, known to me to be the person described in and the person who executed the foregoing instrument of assignment and he did acknowledge the same to be his free act and deed.

Signature

Printed Name, Notary Public My commission expires: _____

IN WITNESS WHEREOF, I hereby set my hand and affix my seal this <u>14</u> day of <u>Tanuary</u>, 2011.

Rosario Mollica

State of Massachusetts County of Middleras Ş

On this day and year aforesaid, before me personally appeared <u>Reany Multica</u>, known to me to be the person described in and the person who executed the foregoing instrument of assignment and he did acknowledge the same to be his free act and deed.

Signature Griffin-Stone Printed Name Oteray Public My commission Expires April 1, 2016



FEB-25-2011 FRI 02:22 PM

ATTORNEY DOCKET

ENTG1984-US

FAX NO.

P. 06

PATENT APPLICATION Serial No. 12/993,791

- 4 of 4 -

IN WITNESS WHEREOF, I hereby set my hand and affix my seal this _____ day of , 2011.

Gregg T. Conner

State of _____) County of _____)

On this day and year aforesaid, before me personally appeared______, known to me to be the person described in and the person who executed the foregoing instrument of assignment and he did acknowledge the same to be his free act and deed.

Signature

Printed Name, Notary Public My commission expires: _____

ENTG1984-US

PATENT APPLICATION Serial No. 12/993,791

- 1 of 4 -

ASSIGNMENT

Peabody Y.X. Jan 20,2011

This Assignment is made by Yanan Annie Xia, of Lynnfield, MA; J. Karl Niermeyer, of Tyngsboro, MA; Rosario Mollica, of Wilmington, MA and Gregg T. Conner of Camas, WA ("Assignors").

WHEREAS, Assignors have invented a new and useful invention entitled "GASIFICATION SYSTEMS AND METHODS FOR MAKING BUBBLE FREE SOLUTIONS OF GAS IN LIQUID", for which an application for United States Patent is made, said application being submitted concurrently herewith; and;

WHEREAS, Assignors believe themselves to be the original inventors of the invention including any and all improvements disclosed in said application ("Invention"); and

WHEREAS, the parties desire to have a recordable instrument assigning the entire right, title and interest in and to said Invention, said application, on any subsequently filed divisional, continuation, continuation-in-part, re-examination, reissue or other application for protection ("Applications"), and any patents, invention registrations or other forms of protection ("Patents") that may be granted for said Invention from any Applications in the United States and throughout the world:

NOW, THEREFORE, in accordance with the obligations to assign the Invention and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors hereby sell, assign, and transfer to Entegris, Inc. having a principal place of business at 129 Concord Road Billerica, MA 01821-4600 (hereinafter referred to as "Assignee"), the entire right, title, and interest in and to said Invention, said Applications and any Patents that may be granted for said Invention in the United States and throughout the world, including the right to file foreign applications directly in the name of the Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties, or otherwise.

Assignors agree that, upon request and without further compensation, but at no expense to Assignors, they and/or their legal representatives and assigns will do all lawful acts, including the execution of papers and the giving of testimony, that may be necessary or desirable for obtaining, sustaining, reissuing, or enforcing the Patents in the United States and throughout the world for said Invention, and for perfecting, recording, or maintaining the title of Assignee, its successors and assigns, to said Invention, said application, and any Patents granted for said Invention in the United States and throughout the world.

PATENT APPLICATION

Serial No. 12/993,791

ATTORNEY DOCKET ENTG1984-US

- 2 of 4 -

Assignors represent and warrant that they have not granted and will not grant to others any rights inconsistent with the rights granted herein.

Assignors authorize and request the Commissioner for Patents of the United States and of all foreign countries to issue any Patents granted for said Invention, whether on said application or on any subsequently filed divisional, continuation, continuation-in-part, re-examination, reissue or other application, to Assignee, its successors and assigns, as the assignee of the entire interest in said Invention.

IN WITNESS WHEREOF, I hereby set my hand and affix my seal this Joth day of Jan. _____, 2011.

Yanan Annie Xia

State of Massachuse § Middlese County of ___

On this day and year aforesaid, before me personally appeared $\sqrt{2000}$ A_{nove} , $\sqrt{4}e$ known to me to be the person described in and the person who executed the foregoing instrument of assignment and he did acknowledge the same to be his free act and deed.

May Signature

Printed Name, Notary Public My commission expires: 10/14/30/6

> Noreen Buckley Notary Public My Commission Expires October 14, 2016



ENTG1984-US

FAX NO.

P. 09

PATENT APPLICATION Serial No. 12/993,791

- 3 of 4 -

IN WITNESS WHEREOF, I hereb	by set my hand and affix my	seal this $\underline{\mathcal{P}}$ day of
<u>Sau 19, 1999</u> , 2011.	J. Karl Niermeyer	ange
State of <u>Massachuse k3</u> County of <u>Middle sup</u>)§		
On this day and year aforesaid, be	fore me personally appeared	J. Karl Niemen
known to me to be the person described	in and the person who exe	ecuted the foregoing
instrument of assignment and he did acknowle	edge the same to be his free a	ct and deed.
Sighature Sighature Neren Buckle Printed Name, Notary Public My commission expires: 16/14/2014	Noreen Buckley Notary Public My Commission Expires October 14, 2016	
IN WITNESS WHEREOF, I here	by set my hand and affix my	y seal this day of
, 2011.		
	Rosario Mollica	
State of) §		
County of)		

On this day and year aforesaid, before me personally appeared______, known to me to be the person described in and the person who executed the foregoing instrument of assignment and he did acknowledge the same to be his free act and deed.

Signature

Printed Name, Notary Public My commission expires:

ENTG1984-US

PATENT APPLICATION Serial No. 12/993,791

- 4 of 4 -

Gregg T. Conner

State of WAShingt) § County of <u>CONK</u>

On this day and year aforesaid, before me personally appeared <u>GF99</u> <u>CoNFR</u> known to me to be the person described in and the person who executed the foregoing instrument of assignment and he did acknowledge the same to be his free act and deed.

JMYM Signature

Printed Name, Notary Public My commission expires: 1011011

ROCHELLE F. GETTMANN	
NOTARY PUBLIC	
STATE OF WASHINGTON	
COMMISSION EXPIRES	
OCTOBER 18, 2011	

PATENT REEL: 025848 FRAME: 0857

RECORDED: 02/25/2011