

## 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>Srinivas Garimella</td> <td>02/05/2013</td> </tr> <tr> <td>Jared Carpenter Delahanty</td> <td>01/24/2013</td> </tr> <tr> <td>Ananda Krishna Nagavarapu</td> <td>01/24/2013</td> </tr> </tbody> </table>		Name	Execution Date	Srinivas Garimella	02/05/2013	Jared Carpenter Delahanty	01/24/2013	Ananda Krishna Nagavarapu	01/24/2013
Name	Execution Date								
Srinivas Garimella	02/05/2013								
Jared Carpenter Delahanty	01/24/2013								
Ananda Krishna Nagavarapu	01/24/2013								
RECEIVING PARTY DATA									
Name:	GEORGIA TECH RESEARCH CORPORATION								
Street Address:	505 Tenth Street, N.W.								
City:	Atlanta								
State/Country:	GEORGIA								
Postal Code:	30332								
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>13814792</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13814792				
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Application Number:	13814792								
CORRESPONDENCE DATA									
Fax Number:	4049626571								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
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ATTORNEY DOCKET NUMBER:	011529.112079 GTRC5358								
NAME OF SUBMITTER:	Benjamin C. Wiles								
<p>Total Attachments: 6          source=GTRC5358_Assignment_Executed#page1.tif</p>									

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## ASSIGNMENT

WHEREAS, we, **Srinivas Garimella, Jared Carpenter Delahanty, and Ananda Krishna Nagavarapu** (collectively referred to as "ASSIGNOR"), have invented certain improvements in a **VAPOR-LIQUID HEAT AND/OR MASS EXCHANGE DEVICE**, for which a Patent Cooperation Treaty patent application was filed on 10 August 2011 and provided Serial No. PCT/US2011/047304, and for which a U.S. Provisional Patent Application was filed 10 August 2010 and provided Serial No. 61/372,213, and for which future applications may be filed, (collectively referred to as the "Application"), and whereas

**GEORGIA TECH RESEARCH CORPORATION**  
**505 Tenth Street, N.W.**  
**Atlanta, Georgia 30332-0415**  
**United States**

("ASSIGNEE") desires to purchase all of ASSIGNOR's rights in same;

**NOW THEREFORE**, in consideration of the sum of One Dollar (\$1.00) and other good and valuable considerations paid by the said ASSIGNEE, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR has and by these presents does hereby sell, assign, transfer and convey unto said ASSIGNEE all of ASSIGNOR's rights, title, and interest in and to said Application, including in and to any conventional, division, continuation, continuation-in-part, substitution, reissue, renewal, reexam, continued prosecution application ("CPA"), or request for continued examination ("RCE") thereof, and in and to all inventions and improvements thereon (herein collectively referred to as "Related US Applications"), preparatory to obtaining Letters Patent of the United States therefore; and ASSIGNOR hereby requests the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States resulting from said Application and Related US Applications, to ASSIGNEE, for its interest and for the sole use and benefit of ASSIGNEE and its assigns and legal representatives.

**For the same consideration**, ASSIGNOR, by these presents does sell, assign, and transfer to ASSIGNEE all of ASSIGNOR's rights, title and interest in and to any foreign and international applications related to and/or seeking benefit of said Application and Related US Applications, and in and to all inventions and improvements thereon (herein collectively referred to as "Related Foreign Applications"), in and to any Letters Patent and similar protective rights granted on said Related Foreign Applications, and in and to the right to claim any applicable priority rights arising from or required for said Related Foreign Applications under the terms of any applicable conventions, treaties, statutes, or regulations, said Related Foreign Applications to be filed and issued in the name of ASSIGNEE or its designee, insofar as permitted by applicable law.

**For the same consideration**, ASSIGNOR agrees, without charge to ASSIGNEE, but at ASSIGNEE'S expense, to sign all lawful papers, execute said Application, Related US Applications and Related Foreign Applications, make all assignments and rightful oaths, assist in prosecution of said Application, Related US Applications and Related Foreign Applications, assist in prosecution of legal proceedings, and generally do everything reasonably possible to aid ASSIGNEE its successors, assigns, and nominees, to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world.

**AND, for the same consideration,** ASSIGNOR also hereby sells, assigns and transfers unto ASSIGNEE all of ASSIGNOR's rights and claims to sue for damages and other remedies with respect to any and all past infringement of all said Application, Related US Applications, and Related Foreign Applications, including said inventions and improvements which may have occurred before the date of this Assignment.

[Signatures on following pages]

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 5<sup>th</sup> day of February, 2013.

Srinivas Garimella (SEAL)  
Srinivas Garimella

Witnessed by: [Signature]  
Signature

Date: 2-5-13

Staeffer Monroe  
Printed Name of Witness

Witnessed by: [Signature]  
Signature

Date: 2-5-13

Christopher Keinath  
Printed Name of Witness

SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY

IN WITNESS WHEREOF, I have hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2013.

\_\_\_\_\_  
Srinivas Garimella (SEAL)

State of \_\_\_\_\_

County of \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2013, before me, a notary public, came to me known and known to be the individual described in and who executed the foregoing assignment, and he duly acknowledged the same to be his free act and deed.

\_\_\_\_\_  
NOTARY PUBLIC

(SEAL)

My Commission Expires:

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 24<sup>th</sup> day of January, 2013.

Jared Carpenter Delahanty (SEAL)  
Jared Carpenter Delahanty

Witnessed by: Adrienne Little  
Signature

Date: Jan 24, 2013

Adrienne Little  
Printed Name of Witness

Witnessed by: Brian M Frank  
Signature

Date: 01/24/2013

Brian M Frank  
Printed Name of Witness

SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY

IN WITNESS WHEREOF, I have hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2013.

\_\_\_\_\_  
(SEAL)  
Jared Carpenter Delahanty

State of \_\_\_\_\_

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 2013, before me, a notary public, came to me known and known to be the individual described in and who executed the foregoing assignment, and he duly acknowledged the same to be his free act and deed.

\_\_\_\_\_  
NOTARY PUBLIC

(SEAL)

My Commission Expires:

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 24 day of January, 2013.

N. Ananda Krishna (SEAL)  
**Ananda Krishna Nagavarapu**

Witnessed by: Susan Erickson Date: 1-24-13  
Signature

Susan Erickson  
Printed Name of Witness

Witnessed by: Parag A. Gupte Date: 1-24-13  
Signature

Parag A. Gupte  
Printed Name of Witness

**SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY**

IN WITNESS WHEREOF, I have hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2013.

\_\_\_\_\_  
**Ananda Krishna Nagavarapu** (SEAL)

State of \_\_\_\_\_

County of \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2013, before me, a notary public, came to me known and known to be the individual described in and who executed the foregoing assignment, and he duly acknowledged the same to be his free act and deed.

\_\_\_\_\_  
NOTARY PUBLIC

(SEAL)

My Commission Expires:

In Witness Whereof, Assignee hereby accepts from Assignor the sale, assignment, transfer and conveyance unto said Assignee of the full, exclusive and entire right, title, and interest in and to said Application, Related US Applications and Related Foreign Applications, by its duly authorized officer this 5<sup>th</sup> day of February, 2013.

Georgia Tech Research Corporation  
(Assignee)

By: \_\_\_\_\_

Name: \_\_\_\_\_



Kimberly Dunn

Title: \_\_\_\_\_

Authorized Signatory

Witnessed by: \_\_\_\_\_



Signature

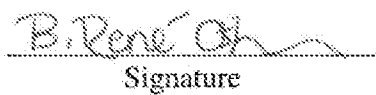
Date: \_\_\_\_\_

February 5, 2013

Chris Davis

Printed Name of Witness

Witnessed by: \_\_\_\_\_



Signature

Date: \_\_\_\_\_

February 5, 2013

B. Rene Osborn

Printed Name of Witness