

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

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>Ryan Lively</td> <td>10/15/2008</td> </tr> <tr> <td>Ronald R. Chance</td> <td>10/15/2008</td> </tr> <tr> <td>William J. Koros</td> <td>10/15/2008</td> </tr> </tbody> </table>		Name	Execution Date	Ryan Lively	10/15/2008	Ronald R. Chance	10/15/2008	William J. Koros	10/15/2008		
Name	Execution Date										
Ryan Lively	10/15/2008										
Ronald R. Chance	10/15/2008										
William J. Koros	10/15/2008										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Georgia Tech Research Corporation</td> </tr> <tr> <td>Street Address:</td> <td>505 Tenth Street, NW</td> </tr> <tr> <td>City:</td> <td>Atlanta</td> </tr> <tr> <td>State/Country:</td> <td>GEORGIA</td> </tr> <tr> <td>Postal Code:</td> <td>30332-0415</td> </tr> </table>		Name:	Georgia Tech Research Corporation	Street Address:	505 Tenth Street, NW	City:	Atlanta	State/Country:	GEORGIA	Postal Code:	30332-0415
Name:	Georgia Tech Research Corporation										
Street Address:	505 Tenth Street, NW										
City:	Atlanta										
State/Country:	GEORGIA										
Postal Code:	30332-0415										
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>13404564</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13404564						
Property Type	Number										
Application Number:	13404564										
CORRESPONDENCE DATA											
<p>Fax Number: (404)962-6849          Phone: (404) 885-2773          Email: ryan.schneider@troutmansanders.com  <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Ryan A. Schneider          Address Line 1: 600 Peachtree Street, NE, Suite 5200          Address Line 2: Bank of America Plaza          Address Line 4: Atlanta, GEORGIA 30308-2216</p>											
ATTORNEY DOCKET NUMBER:	GTRC4394DIV1										
NAME OF SUBMITTER:	Candice P. Dysart										
<p>Total Attachments: 4          source=GTRC4394 GTRC ASSIGNMENT#page1.tif          source=GTRC4394 GTRC ASSIGNMENT#page2.tif          source=GTRC4394 GTRC ASSIGNMENT#page3.tif          source=GTRC4394 GTRC ASSIGNMENT#page4.tif</p>											

CH \$40.00 13404564

# **ASSIGNMENT**

WHEREAS, we, **Ryan Lively, Ronald R. Chance, and William J. Koros** (collectively, "ASSIGNOR"), have invented certain improvements in **Sorbent Fiber Compositions and Methods of Temperature Swing Adsorption** for which a U.S. Provisional Patent Application No. 61/051,595, filed on 13 May 2008, a PCT Patent Application No. PCT/US08/68587, filed on 27 June 2008, and a U.S. Non-Provisional Patent Application No. 12/163,140, filed on 27 June 2008, (collectively, "Application") were filed, and whereas

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

("ASSIGNEE") desires to purchase all the 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 the full, exclusive and entire right, title, and interest in and to said Application, including in and to any provisional, 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 U.S. Applications"), preparatory to obtaining Letters Patent of the United States therefor; 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 U.S. 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 the full, exclusive, and entire right, title and interest in and to any foreign and international applications related to and/or seeking benefit of said Application and Related U.S. Applications and in and to all inventions and improvements thereon (herein collectively referred to as "Related International Applications"), in and to any Letters Patent and similar protective rights granted on said Related International Applications, and in and to the right to claim any applicable priority rights arising from or required for said Related International Applications under the terms of any applicable conventions, treaties, statutes, or regulations, said Related International 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 U.S. Applications and Related International Applications, make all assignments and rightful oaths, assist in prosecution of said Application, Related U.S. Applications, and Related International 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 rights and claims to sue for damages and other remedies with respect to any and all past infringement of all said Application, Related U.S. Applications, and Related International Applications, including said inventions and improvements which may have occurred before the date of this Assignment.

Assignment to GEORGIA TECH RESEARCH CORPORATION

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 15<sup>th</sup> day of October, 2008.

  
\_\_\_\_\_  
Ryan Lively (SEAL)

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

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

On this \_\_\_\_ day of \_\_\_\_\_, 2008, 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

My Commission Expires:

(SEAL)

Assignment to GEORGIA TECH RESEARCH CORPORATION

1983300-1

Page 2 of 4

GTRC4394 Assignment

PATENT  
REEL: 027866 FRAME: 0835

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 15<sup>th</sup> day of October, 2008.

R. H. Chance (SEAL)  
Ronald R. Chance

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

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

On this \_\_\_\_\_ day of \_\_\_\_\_, 2008, 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:

Assignment to GEORGIA TECH RESEARCH CORPORATION

1988300-1

Page 3 of 4

GTRC4394 Assignment

Patent  
21:21 8007-81-100  
F008

REEL: 027866 FRAME: 0836

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 15 day of October 2008.

William J. Koros (SEAL)  
William J. Koros

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

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

On this \_\_\_\_ day of \_\_\_\_\_, 2008, 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

My Commission Expires:

(SEAL)

Assignment to GEORGIA TECH RESEARCH CORPORATION

1002300-1

Page 4 of 4

GTRC4394 Assignment