

PATENT ASSIGNMENT

Electronic Version v1.1

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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>Bret P. NEESE</td><td>05/06/2011</td></tr><tr><td>Baojin CHU</td><td>05/06/2011</td></tr></tbody></table>	Name	Execution Date	Bret P. NEESE	05/06/2011	Baojin CHU	05/06/2011	
Name	Execution Date						
Bret P. NEESE	05/06/2011						
Baojin CHU	05/06/2011						
RECEIVING PARTY DATA							
Name:	THE PENN STATE RESEARCH FOUNDATION						
Street Address:	304 Old Main,						
City:	University Park						
State/Country:	PENNSYLVANIA						
Postal Code:	16802						
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>12844335</td></tr></tbody></table>	Property Type	Number	Application Number:	12844335			
Property Type	Number						
Application Number:	12844335						
CORRESPONDENCE DATA							
Fax Number:	(202)756-8087						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
Phone:	202-756-8000						
Email:	kadkins@mwe.com						
Correspondent Name:	McDermott Will & Emery LLP						
Address Line 1:	600 Thirteenth Street, N.W.						
Address Line 4:	Washington, DISTRICT OF COLUMBIA 20005-3096						
ATTORNEY DOCKET NUMBER:	059516-0114						
NAME OF SUBMITTER:	Daniel Bucca						
Total Attachments: 8 source=0595160114assignment2#page1.tif source=0595160114assignment2#page2.tif source=0595160114assignment2#page3.tif source=0595160114assignment2#page4.tif source=0595160114assignment2#page5.tif source=0595160114assignment2#page6.tif source=0595160114assignment2#page7.tif source=0595160114assignment2#page8.tif							

CH \$40.00 12844335

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PATENT
REEL: 026462 FRAME: 0912

Docket No.: 059516-0114

ASSIGNMENT

WHEREAS We, Qiming ZHANG of 548 Westgate Dr., State College, PA 16802, Sheng-Guo LU of 425 Waupelani Dr., Apt. 511, State College, PA 16801, Xinyu LI of 522 East College Avenue, Apt. 308, State College, PA 16801, Lee GORNY of 315 S. Allen St., Apt. 626, State College, PA 16801, Jiping CHENG of 2297 Quail Run Road, State College, PA 16801, Bret P. NEESE of 106 Chatsworth Drive, Somerset, NJ 08873 and Baojin CHU of 841 Southgate Dr., apt. A10, State College, PA 16801, respectively, have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled REFRIGERATION DEVICES BASED ON POLAR-POLYMERS, and filed concurrently herewith;

OR

for which an application for United States Letters Patent was filed on July 27, 2010, and identified by United States Application No. 12/844,335;

AND WHEREAS, THE PENN. STATE RESEARCH FOUNDATION, a corporation of the Commonwealth of Pennsylvania and having an address of 304 Old Main, University Park, PA 16802 is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, We do hereby sell, assign, transfer and set over unto THE PENN STATE RESEARCH FOUNDATION, its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including the right of priority and including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, We hereby agree with the said assignee that We will not execute any writing or do any act whatsoever conflicting with these presents, and that We will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND We request the Commissioner for Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said THE PENN STATE RESEARCH FOUNDATION, its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

Date

Qiming Zhang

Date

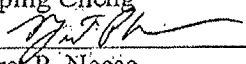
Sheng-Guo Lu

Date

Xinyu Li

PATENT

REEL: 026462 FRAME: 0913

Date	Lee Gorny
Date	Jiping Cheng
5-6-2011	
Date	Bret P. Neese
Date	Baojin Chu

Signature Witness:

STATE OF _____)
) SS:
COUNTY OF _____)

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Qiming Zhang, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public

My commission expires _____

Signature Witness:

STATE OF _____)
) SS:
COUNTY OF _____)

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Sheng-Guo Lu, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public

My commission expires _____

Signature Witness:

STATE OF _____)
) SS:
COUNTY OF _____)

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Xinyu Li, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public
My commission expires _____

Signature Witness:

STATE OF _____)
) SS:
COUNTY OF _____)

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Lee Gorny, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public
My commission expires _____

Signature Witness:

STATE OF _____)
) SS:
COUNTY OF _____)

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Jiping Cheng, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public
My commission expires _____

Signature Witness:

STATE OF New Jersey)

) SS:

COUNTY OF Middlesex)

On this 6th day of May, 2011, before me, the undersigned notary public, personally appeared Bret P. Neese, proved to me through satisfactory evidence of identification, which consisted of drivers license, to be the person whose name is signed on the preceding or attached document in my presence.

Carol Patton

Notary Public

My commission expires 5-20-14**Carol Patton****Notary Public****My Comm. Expires - May 20, 2014****State of New Jersey**

Signature Witness:

STATE OF _____)

) SS:

COUNTY OF _____)

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Baojin Chu, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public

My commission expires _____

PATENT**REEL: 026462 FRAME: 0916**

Docket No.: 059516-0114

ASSIGNMENT

WHEREAS We, Qiming ZHANG of 548 Westgate Dr., State College, PA 16802, Sheng-Guo LU of 425 Waupelani Dr., Apt. 511, State College, PA 16801, Xinyu LI of 522 East College Avenue, Apt. 308, State College, PA 16801, Lee GORNY of 315 S. Allen St., Apt. 626, State College, PA 16801, Jiping CHENG of 2297 Quail Run Road, State College, PA 16801, Bret P. NEESE of 720 B Marlborough Common, Hillsborough, NJ 08844 and Baojin CHU of 409 Quincy St. Apt. C4, Rapid City, SD 57701, respectively, have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled REFRIGERATION DEVICES BASED ON POLAR-POLYMERS, and filed concurrently herewith;

OR

for which an application for United States Letters Patent was filed on July 27, 2010, and identified by United States Application No. 12/844,335;

AND WHEREAS, THE PENN STATE RESEARCH FOUNDATION, a corporation of the Commonwealth of Pennsylvania and having an address of 304 Old Main, University Park, PA 16802 is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, We do hereby sell, assign, transfer and set over unto THE PENN STATE RESEARCH FOUNDATION, its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including the right of priority and including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, We hereby agree with the said assignee that We will not execute any writing or do any act whatsoever conflicting with these presents, and that We will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND We request the Commissioner for Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said THE PENN STATE RESEARCH FOUNDATION, its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

Date

Qiming Zhang

Date

Sheng-Guo Lu

Date

Xinyu Li

PATENT

REEL: 026462 FRAME: 0917

Date _____ Lee Gorny
Date _____ Jiping Cheng
Date _____ Bret P. Neese
Date 05/06/2011 Chu
Date _____ Baojin Chu

Signature Witness:

STATE OF _____)
COUNTY OF _____) SS:

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Qiming Zhang, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public
My commission expires _____

Signature Witness:

STATE OF _____)
COUNTY OF _____) SS:

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Sheng-Guo Lu, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public
My commission expires _____

Signature Witness:

STATE OF _____)
COUNTY OF _____) SS:

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Xinyu Li, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public

My commission expires _____

Signature Witness:

STATE OF _____)
COUNTY OF _____) SS:

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Lee Gorny, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public

My commission expires _____

Signature Witness:

STATE OF _____)
COUNTY OF _____) SS:

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Jiping Cheng, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

PATENT

REEL: 026462 FRAME: 0919

Signature Witness:

STATE OF _____)

) SS:

COUNTY OF _____)

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Bret P. Neese, proved to me through satisfactory evidence of identification, which consisted of _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public

My commission expires _____

Signature Witness:

STATE OF South Dakota)

) SS:

COUNTY OF Pennington)

On this 6th day of May, 2011, before me, the undersigned notary public, personally appeared Baojin Chu, proved to me through satisfactory evidence of identification, which consisted of SD Drivers Lic. 01336251, to be the person whose name is signed on the preceding or attached document in my presence.

Connie E. Bruch
Notary Public

My commission expires 6-27-2011

