

RECORDATION FORM COVER SHEET PATENTS ONLY

Docket No.: 1021.2007-001

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies)

1. YI HUA MA
2. IVAN P. MARDILOVICH
3. ERIK E. ENGWALL

Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)

Name: WORCESTER POLYTECHNIC INSTITUTE

Internal Address: _____

3. Nature of conveyance:

Assignment Merger
 Security Agreement Change of Name
 Other _____

Execution Date: 1, 2, & 3. JUNE 10, 2004

Street Address: 100 INSTITUTE ROAD

City: WORCESTER State: MA ZIP: 01609

Additional name(s) & address(es) attached? Yes No

4 Application number(s) or patent number(s):

A. Patent Application No.(s)
10/836,088

B. Patent No.(s)

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: N. SCOTT PIERCE, ESQ.

Internal Address: _____

Hamilton, Brook, Smith & Reynolds, P.C.

Street Address: 530 Virginia Road, P.O. Box 9133

City: Concord State: MA ZIP: 01742-9133

6. Total number of applications and patents involved: [1]

7. Total Fee (37 C.F.R. 3.41)..... \$ 40.00

Enclosed
 Authorized to charge any deficiencies or credit any overpayment to deposit account number 08-0380
 Authorization to charge deposit account number 08-0380

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8. Statement and signature.
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

COLIN C. DURHAM
Name of Person Signing

Colin C. Durham
Signature

6/3/2004
Date

Total number of pages including cover sheet, attachments, and document: [4]

CH \$40.00 080380 10636088

Joint

ASSIGNMENT

WHEREAS, we, **Yi Hua Ma, Ivan P. Mardilovich and Erik E. Engwall**, have invented a certain improvement in **Composite Gas Separation Modules Having High Tamman Temperature Intermediate Layers** described in an application for Patent,

- the specification of which is being executed on even date herewith and is about to be filed in the United States Patent Office (*use for utility (37 CFR § 1.53(b)) and design filings only*),
- is about to be filed in the United States Patent Office as a Provisional Application;
- the specification of which is United States Application No. **10/836,088**, filed **April 30, 2004**;
- the specification of which is a Patent Cooperation Treaty Application, International Application No. [], which designates the United States of America;
- which was patented under United States Patent No. [].

WHEREAS, **Worcester Polytechnic Institute** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **100 Institute Road, Worcester, Massachusetts 01609** desires to acquire an interest therein in accordance with agreements duly entered into with us,

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future

applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature:

[Handwritten Signature]
Yi Hua Ma

State/Commonwealth

of Massachusetts

County of Worcester

On this 10th day of June, 2004, before me, the undersigned notary public, personally appeared **Yi Hua Ma**,

personally known to me, or

proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he signed the foregoing instrument as his free act and deed.



[Handwritten Signature] Notary Public

Deborah J. Graves (print name)

My Commission expires 8 / 14 / 2009

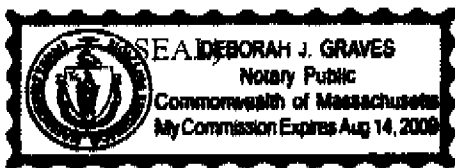
Inventor's Signature: *Ivan P. Mardilovich*
Ivan P. Mardilovich

State/Commonwealth
of Massachusetts
County of Worcester

On this 10th day of June, 2004, before me, the undersigned notary public, personally appeared **Ivan P. Mardilovich**,

- personally known to me, or
- proved to me through satisfactory evidence of identification, which was MA Driver's License

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he signed the foregoing instrument as his free act and deed.



Deborah J. Graves Notary Public
Deborah J. Graves (print name)
My Commission expires 8 / 14 / 09

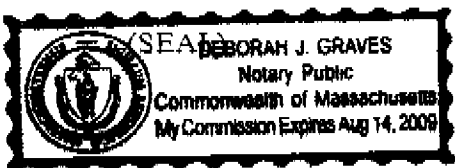
Inventor's Signature: *Erik E. Engwall*
Erik E. Engwall

State/Commonwealth
of Massachusetts
County of Worcester

On this 10th day of June, 2004, before me, the undersigned notary public, personally appeared **Erik E. Engwall**,

- personally known to me, or
- proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he signed the foregoing instrument as his free act and deed.



Deborah J. Graves Notary Public
Deborah J. Graves (print name)
My Commission expires 8 / 14 / 2009