FTO 4505	U.S. DEPARTMENT OF COMMER
(Rev. 10/02)  OMB No. 0651-0011 (exp. 6/30/2005)  To the Honorable Commissioner of Patents and Trademark	U.S. Patent and Trademark Of
OMB No. 0651-0011 (exp. 6/30/2005)	693652
To the Honorable Commissioner of Patents and Trademark	s: Please s ed original documents or copy thereof.
Name of conveying party(ies):	2. Name and address of receiving party(ies):
Bing Ji Stanban Androw Motika	Name: Air Products and Chemicals, Inc.
Stephen Andrew Motika Ronald Martin Pearlstein	
Eugene Joseph Karwacki, Jr.	Internal Address: Patent Department
Dingjun Wu	Street Address: 7201 Hamilton Boulevard
Additional name(s) of conveying party(ies) attached? □Yes ☑No  3. Nature of Conveyance:	
	City Allentown State PA ZIP 18195-15
	Additional name(s) & address(es) attached? ☐ Yes ☑
<ul> <li>☑ Assignment</li> <li>☐ Merger</li> <li>☐ Security Agreement</li> <li>☐ Change of Name</li> <li>☐ Other</li> </ul>	
Execution Date: 12 January 2004; 12 January 2004; 22 January 2004; 12 January 2004; and 12 January 2004	
<ol><li>Application number(s) or patent number(s):</li></ol>	
If this document is being filed together with a new application, the e	xecution date of the application is: 12 January 2004; 12 January
2004; 22 January 2004; 12 January 2004; and 12 Janւ	ary 2004
A. Patent Application No.(s)	B. Patent No.(s)
10/723,714	
10/120,117	attached? □ Yes ☒ No
	menter services of the service
Additional numbers	
<ol><li>Name and address of party to whom correspondence concerning document should be mailed:</li></ol>	6. Total number of applications and patents involved: 1
	NASA
Name: Ruth Ann Borst	7. Total fee (37 CFR 3.41) \$ <b>40.0</b>
Name: Ruth Ann Borst Legal Assistant	☐ Enclosed `
Legal Assistant	
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Legal Assistant	☐ Enclosed
Legal Assistant Internal Address: Patent Department (06299P2 USA) Street Address: 7201 Hamilton Boulevard	☐ Enclosed ☐ Authorized to be charged to deposit account  8. Deposit account number:
Legal Assistant Internal Address: Patent Department (06299P2 USA) Street Address: 7201 Hamilton Boulevard City Allentown State PA ZIP 18195-1	☐ Enclosed ☐ Authorized to be charged to deposit account  8. Deposit account number:  01-0493
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PATENT REEL: 015055 FRAME: 0489

## **ASSIGNMENT**

For value received, we, Bing Ji, Stephen Andrew Motika, Ronald Martin Pearlstein, Eugene Joseph Karwacki, Jr., and Dingjun Wu, hereby sell, assign, and transfer to **AIR PRODUCTS AND CHEMICALS, INC.**, a corporation of the State of Delaware, having an office at 7201 Hamilton Boulevard, Allentown, PA 18195-1501, the entire right, title, and interest in and to the invention relating to

## METHOD FOR ETHCING HIGH DIELECTRIC CONSTANT MATERIALS AND FOR CLEANING DEPOSITION CHAMBERS FOR HIGH DIELECTRIC CONSTANT MATERIALS

described in our application for Letters Patent of the United States (identified by Docket No. 06299P2 USA) executed of even date herewith, in and to all Letters Patent which may be issued upon said application, in and to any divisional or reissue applications based thereon, and in and to all Letters Patent upon said invention or improvements which may be granted in foreign countries. We hereby also assign and convey to said **AIR PRODUCTS AND CHEMICALS, INC.**, all the rights accruing to us by virtue of the International Convention for the Protection of Industrial Property (Art. 4), including the right to apply for and to have patents issued in its own name.

And we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and the Officials of the Patent Offices of all other countries to issue the Letters Patent of their respective countries to said **AIR PRODUCTS AND CHEMICALS, INC.**, as assignee of the entire right, title, and interest in and to the same.

necessary to secure to and vest in said AIR PRODUCTS AND CHEMICALS, INC., its

And we hereby promise and agree to execute all papers and perform all acts

Successors and assigns, the rights conveyed as herein set forth.

(L.S.) Level Malue Molika

(L.S.) Stephen Andrew Motika

(L.S.) Stephen Andrew Motika

(L.S.) Poate

(L.S.) Eugene Joseph Karwacki, Jr.

January 22, 2004

Date

(L.S.)

Dingjun Wu

12 January 04

Date

RECORDED: 03/11/2004

PATENT REEL: 015055 FRAME: 0490