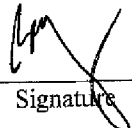
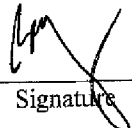
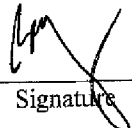


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Form PTO-1595
OMB No. 0651-0027

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party (ies):</p> <p align="center">Advanced Technology Materials, Inc.</p> <p>Additional name(s) of conveying party (ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party (ies)</p> <p>Name: MST Technology GmbH</p> <p>Internal Address:</p> <p>Street Address: Benediktstrasse 1, D-82069</p> <p>City: Hohenschäftlarn GERMANY</p>			
<p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other: _____</p> <p>Execution Date: <u>3/14/2005</u></p>	<p>4. Application number(s) or patent number (s):</p> <p>If this document is being filed together with a new application, the execution date of the application is: _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; padding: 5px;"> <p>A. Patent Application No. (s)</p> <p align="center">See Attached Schedule A</p> </td> <td style="width:50%; padding: 5px;"> <p>B. Patent No. (s)</p> </td> </tr> </table>	<p>A. Patent Application No. (s)</p> <p align="center">See Attached Schedule A</p>	<p>B. Patent No. (s)</p>	
<p>A. Patent Application No. (s)</p> <p align="center">See Attached Schedule A</p>	<p>B. Patent No. (s)</p>			
<p>Additional numbers attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>				
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: Steven J. Hultquist</p> <p>Internal Address: Intellectual Property/Technology Law</p> <p>Street Address: P.O. BOX 14329</p> <p>City: Research Triangle Park State: NC Zip: 27709</p>	<p>6. Total Number of applications and patents involved: <u>16</u></p> <p>7. Total fee (37 C.F.R. 3.41).....\$ <u>640.00</u></p> <p><input checked="" type="checkbox"/> Enclosed</p> <p><input checked="" type="checkbox"/> Authorized to be charged to deposit account</p> <p>8. Deposit account Number:</p> <p align="center"><u>083284</u></p> <p align="center">(Attach Duplicate copy of this page if paying by deposit account)</p>			
<p>DO NOT USE THIS SPACE</p>				
<p>9. Statement and signature.</p> <p><i>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.</i></p> <table style="width:100%;"> <tr> <td style="width:40%; text-align: center;"> <p><u>Steven J. Hultquist</u></p> <p>Name of person signing</p> </td> <td style="width:20%; text-align: center;">  <p>Signature</p> </td> <td style="width:40%; text-align: center;"> <p><u>March 14, 2005</u></p> <p>Date</p> </td> </tr> </table> <p align="center">Total number of pages including cover sheet, attachments and documents: <u>5</u></p>		<p><u>Steven J. Hultquist</u></p> <p>Name of person signing</p>	 <p>Signature</p>	<p><u>March 14, 2005</u></p> <p>Date</p>
<p><u>Steven J. Hultquist</u></p> <p>Name of person signing</p>	 <p>Signature</p>	<p><u>March 14, 2005</u></p> <p>Date</p>		

OP \$640.00 09442568

SCHEDULE A**PATENT APPLICATIONS****A. Pending U.S. Patent Applications**

1.
09/442,568 Optical Hydrogen Sensor
Filed: 11/18/1999
2.
10/138,092 Optical Hydrogen Detector
Filed: 5/2/2002
3.
10/202,590 Gas Monitoring System and Method
Filed: 7/24/2002
4.
10/218,551 Fourier Transform Infrared (FTIR) Spectrometric Toxic Gas Monitoring
System, and Method of Detecting Toxic Gas Species in a Fluid
Environment Containing or Susceptible to the Presence of Such Toxic
Gas Species
Filed 8/14/2002
5.
10/218,262 Electrochemical Cells, and Gas Sensor and Fuel Cell Devices
Comprising Same
Filed 8/14/2002
6.
10/285,147 A System and Method for Detecting Hydride Gases at Low
Concentrations and in the Presence of Varying Humidity Levels
Filed 10/31/2002
7.
10/300,275 Rare Earth Metal Sensor
Filed 11/20/2002
8.
10/370,937 Micro-machined thin film sensor arrays for the detection of H₂, NH₃,
and sulfur containing gases, and method of making and using the same
Filed: 2/20/2003
9.
10/429,909 Chemical Sensor Responsive to Change in Volume of Material Exposed
to Target Particle
Filed 5/5/2003

10.
10/435,618 Electrode Comprising Material to Help Stabilize Oxide of Catalyst for
Electrochemical Sensor
Filed 5/9/2003
11.
10/795,529 Gas Sensor with Attenuated Drift Characteristic
Filed 3/8/2004
12.
10/807,020 Optical Disk Based Gas Sensing and Storage Device
Filed 3/23/2004
13.
10/880,248 Gas Monitoring Assembly Comprising One or More Gas Sensors and
One or More Getters, and Method of Using Same
Filed: 6/29/2004

B. Pending PCT Patent Applications

1. PCT/US04/13769
Chemical Sensor Responsive to Change in Volume of Material Exposed
to Target Particle
Priority Date: 5/5/2003
2. PCT/US04/13844
Electrode Comprising Material to Help Stabilize Oxide of Catalyst for
Electrochemical Sensor
Priority Date: 5/9/2003
3. PCT/US03/36687
Rare Earth Metal Sensor
Priority Date: 11/20/2002

PATENT ASSIGNMENT

This PATENT ASSIGNMENT is made effective as of May 6, 2004, from Advanced Technology Materials, Inc., a Delaware corporation having an address at 7 Commerce Drive, Danbury, CT 06810 (hereinafter referred to as "Assignor"), to MST Technology GmbH, a corporation organized under the laws of Germany, having a place of business at Benediktstrasse 1, D-82069, Hohenschäftlarn, Germany (hereinafter referred to "Assignee").

WHEREAS, Assignor is the owner of the patent applications identified on Schedule A attached hereto (hereinafter collectively, the "Patent Rights"); and

WHEREAS, Assignee is desirous of acquiring the Patent Rights, and

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor does hereby sell, transfer, convey, grant and assign unto Assignee, Assignor's entire right, title and interest in and to the Patent Rights and the inventions claimed therein, in the United States and all jurisdictions outside the United States, including the right to apply for letters patent in any and all such jurisdictions based on said Patent Rights, and including all divisional, renewal, substitute, continuation, continuation-in-part, reexamination, reissue, extension and convention applications or patents based in whole or in part upon said Patent Rights, and any and all letters patent that may issue thereon, in any and all such jurisdictions, to the full end of the term or terms for which said letters patent may be issued, and every priority right that is or may be predicated upon or arise from the foregoing, the same to be held and enjoyed by Assignee for its own use and benefit and for the use and benefit of its successors and assigns, to be used as fully and entirely as said rights would have been held and enjoyed by Assignor if this assignment had not been made.

Assignor hereby authorizes the Commissioner for Patents of the United States and other empowered officials of the United States Patent and Trademark Office and/or the appropriate empowered officials in relevant jurisdictions outside the United States, to record the transfer of the Patents to Assignee as assignee of Assignor's entire right, title and interest therein, and to issue to Assignee all letters patent and other items referred to above which may issue with respect to the Patents, in accordance with this Patent Assignment.

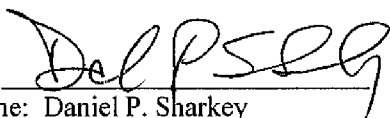
[continued on next page]

IN WITNESS WHEREOF, Assignor has caused this Patent Assignment to be executed by its proper officer thereunto duly authorized, as of the date first above written.

ASSIGNOR:

Advanced Technology Materials, Inc.

By:



Name: Daniel P. Sharkey

Title: Vice President, Treasurer and Chief Financial Officer

STATE OF CONNECTICUT

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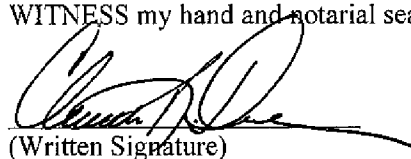
} SS:

COUNTY OF FAIRFIELD

}

Before me, the undersigned, a Notary Public of the State of Connecticut, personally appeared Daniel P. Sharkey, having been sworn by me according to law did depose and say he was the Vice President, Treasurer and Chief Financial Officer of Advanced Technology Materials, Inc., (the "Assignor") and did acknowledge the execution of the foregoing Patent Assignment on behalf of said Assignor.

WITNESS my hand and notarial seal this the 9th day of March 2005.



(Written Signature)

Claudia K. Dene

(Printed Signature)

CLAUDIA K. DENE

NOTARY PUBLIC

My Commission Expires Dec. 31, 2005

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re United States Patent Applications of:)	Docket No.: 4249-100
09/442,568)	
10/285,147)	
10/435,618)	
10/138,092)	Customer No. 23448
10/300,275)	
10/795,529)	
10/202,590)	
10/370,937)	
10/807,020)	
10/218,551)	
10/429,909)	
10/880,248)	
10/218,262)	
International Application Nos.:)	
PCT/US04/13769)	
PCT/US04/13844)	
PCT/US03/36687)	

FACSIMILE TRANSMISSION CERTIFICATEFax No.: (703) 306-5995

I hereby certify that this document is being filed in the United States Patent and Trademark Office, via facsimile transmission to the Mail Stop Assignment Recordation Services, Director of the US Patent & Trademark Office, PO Box 1450, Alexandria, VA 22313-1450, on March 14, 2005, to United States Patent and Trademark Office facsimile transmission number:

Joyce Gevirtzman
Mailer's Name

March 14, 2005
Date

SUBMISSION OF ASSIGNMENT DOCUMENT

Mail Stop Assignment Recordation Services
Director of the US Patent & Trademark Office
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed and submitted herewith is an Assignment document for the above-identified U.S. patent applications and International patent applications, along with a Credit Card Payment Form authorizing the amount of \$640.00 to be charged for payment of the Assignment recordation fee.

The Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account 08-3284 of Intellectual Property/Technology Law.

Respectfully submitted,



Steven J. Hultquist
Attorney for the Applicant(s)
Registration No. 28,021

INTELLECTUAL PROPERTY/
TECHNOLOGY LAW
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IPTL File: 4249-100