

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>Yifeng Zhou</td> <td>01/11/2013</td> </tr> <tr> <td>Srinivas D. Nemani</td> <td>01/07/2013</td> </tr> <tr> <td>Khoi Doan</td> <td>01/07/2013</td> </tr> <tr> <td>Jeremiah T. Pender</td> <td>01/07/2013</td> </tr> </tbody> </table>		Name	Execution Date	Yifeng Zhou	01/11/2013	Srinivas D. Nemani	01/07/2013	Khoi Doan	01/07/2013	Jeremiah T. Pender	01/07/2013
Name	Execution Date										
Yifeng Zhou	01/11/2013										
Srinivas D. Nemani	01/07/2013										
Khoi Doan	01/07/2013										
Jeremiah T. Pender	01/07/2013										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Applied Materials, Inc.</td> </tr> <tr> <td>Street Address:</td> <td>3050 Bowers Avenue</td> </tr> <tr> <td>City:</td> <td>Santa Clara</td> </tr> <tr> <td>State/Country:</td> <td>CALIFORNIA</td> </tr> <tr> <td>Postal Code:</td> <td>95054</td> </tr> </table>		Name:	Applied Materials, Inc.	Street Address:	3050 Bowers Avenue	City:	Santa Clara	State/Country:	CALIFORNIA	Postal Code:	95054
Name:	Applied Materials, Inc.										
Street Address:	3050 Bowers Avenue										
City:	Santa Clara										
State/Country:	CALIFORNIA										
Postal Code:	95054										
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>13653177</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13653177						
Property Type	Number										
Application Number:	13653177										
CORRESPONDENCE DATA											
Fax Number: 5034396073 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: (503) 439-8778 Email: gigi_hoover@bstz.com Correspondent Name: Justin K. Brask Address Line 1: 1279 Oakmead Parkway Address Line 4: Sunnyvale, CALIFORNIA 94085-4040											
ATTORNEY DOCKET NUMBER:	4887.P988D										
NAME OF SUBMITTER:	Justin K. Brask										
Total Attachments: 4 source=4887P988D_Assignment_011613#page1.tif source=4887P988D_Assignment_011613#page2.tif source=4887P988D_Assignment_011613#page3.tif source=4887P988D_Assignment_011613#page4.tif											

CH \$40.00 13653177

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, the below-named inventor(s):

Yifeng Zhou; Srinivas D. Nemani; Khoi Doan; Jeremiah T. Pender

hereby sell, assign, and transfer to

Applied Materials, Inc.

a Corporation of Delaware, having a principal place of business at 3050 Bowers Avenue, Santa Clara, California 95054 United States ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which for the non-provisional application may have a declaration executed by the undersigned prior hereto or concurrently herewith and which application (provisional or non-provisional) is entitled

METHOD OF PATTERNING A LOW-K DIELECTRIC FILM

said patent application also identified as follows (when known):

[I/we hereby authorize an attorney or agent for said Assignee to insert below the application number and filing date of said patent application when known.]

United States Patent Application Number 13/653,177 filed October 16, 2012,

and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Each Inventor: Please Sign and Date Below:

1/11/2013

Date

Yifeng Zhou

Name: Yifeng Zhou

Date

Name: Srinivas D. Nemani

Date

Name: Khoi Doan

Date

Name: Jeremiah T. Pender

Date

Name:

Date

Name:

Date

Name:

Date

Name:

Date

Name:

Date

Name:

Date

Name:

Date

Name:

Assignment Document Return Address:

APPLIED MATERIALS, INC.
Patent Counsel
P.O. Box 450A
Santa Clara, CA 95052

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, the below-named inventor(s):

Yifeng Zhou; Srinivas D. Nemani; Khoi Doan; Jeremiah T. Pender

hereby sell, assign, and transfer to

Applied Materials, Inc.

a Corporation of Delaware, having a principal place of business at 3050 Bowers Avenue, Santa Clara, California 95054 United States ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which for the non-provisional application may have a declaration executed by the undersigned prior hereto or concurrently herewith and which application (provisional or non-provisional) is entitled

METHOD OF PATTERNING A LOW-K DIELECTRIC FILM

said patent application also identified as follows (when known):

[I/we hereby authorize an attorney or agent for said Assignee to insert below the application number and filing date of said patent application when known.]

United States Patent Application Number 13/653,177 filed October 16, 2012,

and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Each Inventor: Please Sign and Date Below:

Date 01.07.13 Name: Yifeng Zhou
N. Zhou

Date 01.07.13 Name: Srinivas D. Nemani
Srinivas D. Nemani

Date 01.07.13 Name: Khoi Doan
Khoi Doan

Date 01.07.13 Name: Jeremiah T. Pender
Jeremiah T. Pender

Date _____ Name: _____

Date _____ Name: _____

Date _____ Name: _____

Date _____ Name: _____

Date _____ Name: _____

Date _____ Name: _____

Date _____ Name: _____

Date _____ Name: _____

Assignment Document Return Address:

APPLIED MATERIALS, INC.
Patent Counsel
P.O. Box 450A
Santa Clara, CA 95052