506919455 10/13/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6966290

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TSUTOMU TANAKA	06/15/2020
JOHN C. FORSTER	03/12/2018
RAN LIU	07/30/2020
KENICHI OHNO	06/08/2020
NING LI	06/08/2020
MIHAELA BALSEANU	06/29/2020
KEIICHI TANAKA	06/08/2020
LI-QUN XIA	06/08/2020

RECEIVING PARTY DATA

Name:	APPLIED MATERIALS, INC.		
Street Address: 3050 BOWERS AVENUE			
City: SANTA CLARA			
State/Country: CALIFORNIA			
Postal Code: 95054			

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17498231

CORRESPONDENCE DATA

Fax Number:

506919455

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: lmurphy@dsiplaw.com
Correspondent Name: SERVILLA WHITNEY LLC
Address Line 1: 33 WOOD AVENUE SOUTH

Address Line 2: SUITE 830

Address Line 4: ISELIN, NEW JERSEY 08830

ATTORNEY DOCKET NUMBER: 024057US02DIV

NAME OF SUBMITTER: JONATHAN B. WRIGHT

SIGNATURE: /Jonathan B. Wright, Reg. #72662/

PATENT REEL: 057779 FRAME: 0114

DATE SIGNED:	10/13/2021
Total Attachments: 5	
source=01047026#page1.tif	
source=01047026#page2.tif	
source=01047026#page3.tif	
source=01047026#page4.tif	
source=01047026#page5.tif	

PATENT REEL: 057779 FRAME: 0115

Attorney Docket No. 024057US02

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors

1)	Tsutomu Tanaka 744 Nicholson Ave Santa Clara, CA, 95051 United States of America
2)	John C. Forster 191 Thompson Square Mt. View, CA, 94043 United States of America
3)	Ran Liu 355 N. Wolfe Street, Apt 106 Sunnyvale, CA, 94085 United States of America
4)	Kenichi Ohno 980 Ponderosa Ave., Unit A Sunnyvale, CA, 94086 United States of America
5)	Ning Li 130 Descanso Dr Unit 157 San Jose, CA, 95134 United States of America

6)	Mihaela Balseanu 1639 Belleville Way, Apt T Sunnyvale, CA, 94057 United States of America
7)	Keiichi Tanaka 1995 Ashland Way San Jose, CA, 95130 United States of America
8)	Li-Qun Xia 10221 Western Drive Cupertino, CA, 95014 United States of America

(hereinafter referred to as Assignors), have invented a certain invention entitled:

"Methods And Systems To Modulate Film Stress"

for which application for Letters Patent in the United States was filed on November 7, 2017,

under Serial No. 15805466, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, CA, 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as the Application), and the invention disclosed therein (hereinafter referred to as the Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as the Patents) thereon granted in any and all countries and groups of countries.

Attorney Docket No. 024057US02

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	6/15/2020	, 2020	Ton Tanaka 5673D883F0C64F5 (INVENTOR) Tsutomu Tanaka	
2) .		, 2020	(INVENTOR) John C. Forster	
3)		, 2020	(INVENTOR) Ran Liu	*********

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	, 2018	(INVENTOR) Tsutomu Tanaka
2)	March 126h , 2018	ASIM CFATAM
3)	, 2018	(INVENTOR) John C. Forster
		(INVENTOR) Ran Liu

Attorney Docket No. 024057US02

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)		, 20 20	
,			(INVENTOR) Tsutomu Tanaka
2)		, 2020	(INVENTOR) John C. Forster
3)	7/30/2020	, 2020	Pocusigned by: KAIN LIN 77297457808E4A5 (INVENTOR) Ran Liu

4)	6/8/2020	, 2020	(INVENTOR) Kenichi Ohno
5)	6/8/2020	, 2020	DocuSigned by: My Li F0272EFBCC884E8 (INVENTOR) Ning Li
6)	6/29/2020	, 2020	OBA (INVENTOR) Minaela Balseanu
7)	6/8/2020	, 2020	kuidi Tanaka (INVENTOR) Keiichi Tanaka
8)	6/8/2020	, 2020	Docusigned by: Li-Aux Xia (INVENTOR) Li-Qun Xia