506955745 11/02/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7002583

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
TIMOTHY JOSEPH FRANKLIN	08/12/2020
ADAM FISCHBACH	05/27/2020
EDWARD HAYWOOD	05/02/2020
ABHIJIT B. MALLICK	05/20/2020
PRAMIT MANNA	08/12/2020
CARLATON WONG	05/20/2020
STEPHEN C. GARNER	10/04/2021
ESWARANAND VENKATASUBRAMANIAN	05/20/2020

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:	16876845		

CORRESPONDENCE DATA

Fax Number:

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: cthomas@pattersonsheridan.com,

psdocketing@pattersonsheridan.com

Correspondent Name: PATTERSON & SHERIDAN, LLP

Address Line 1: 24 GREENWAY PLAZA

Address Line 2: SUITE 1600

Address Line 4: HOUSTON, TEXAS 77046

ATTORNEY DOCKET NUMBER:	44017043US
NAME OF SUBMITTER:	CHAD M. DOUGHERTY
SIGNATURE:	/Chad M. Dougherty/

PATENT 506955745 REEL: 057996 FRAME: 0012

DATE SIGNED:	11/02/2021
Total Attachments: 6	
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PATENT REEL: 057996 FRAME: 0013

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1,	Timothy Joseph FRANKLIN	0,	Adam FISCHBACH
1)	c/o Applied Materials, Inc., Law Dept., M/S 1269	2)	c/o Applied Materials, Inc., Law Dept., M/S 1269
	3050 Bowers Avenue		3050 Bowers Avenue
	Santa Clara, California 95054		Santa Clara, California 95054
	Edward HAYWOOD		Abhijit B. MALLICK
3)	c/o Applied Materials, Inc., Law Dept., M/S 1269	4)	c/o Applied Materials, Inc., Law Dept., M/S 1269
	3050 Bowers Avenue		3050 Bowers Avenue
	Santa Clara, California 95054		Santa Clara, California 95054
	Pramit MANNA	۵,	Carlaton WONG
5)	c/o Applied Materials, Inc., Law Dept., M/S 1269	6)	c/o Applied Materials, Inc., Law Dept., M/S 1269
	3050 Bowers Avenue		3050 Bowers Avenue
	Santa Clara, California 95054		Santa Clara, California 95054
_,	Stephen C. GARNER		Eswaranand VENKATASUBRAMANIAN
7)	c/o Applied Materials, Inc., Law Dept., M/S 1269	8)	c/o Applied Materials, Inc., Law Dept., M/S 1269
	3050 Bowers Avenue		3050 Bowers Avenue
	Santa Clara, California 95054		Santa Clara, California 95054

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

SUBSTRATE PROCESSING CHAMBER

for which application for Letters Patent in the United States was filed on May 18, 2020, under Serial No. 16/876,845, 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, California 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 Application), and the invention disclosed therein (hereinafter referred to as 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 Patents) thereon granted in any and all countries and groups of countries.

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 conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

PATENT REEL: 057996 FRAME: 0014

- 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, conventional, 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)	8/12/2020 (DA	ATE)	Docusigned by: Timothy Joseph Franklin/ 690A7F5A02EC48F Timothy Joseph FRANKLIN
2)	5/27/2020 (DA	ATE)	Docusigned by: 35F98938E35C408 Adam FISCHBACH
3)	5/20/2020 (DA	ATE)	Edward HUWOOD 83D4E1DB6F9249B Edward HAYWOOD
4)	5/20/2020 (DA	ATE)	OBJECTARFCEBS455 Abhijit B. MALLICK
5)	(DA	ATE)	Pramit Manna Pramit MANNA
6)	5/20/2020 (DA	ATE)	Carlaton Wong R4B140A90DA4404 Carlaton WONG

7) (DATE) Stephen C. GARNER

8) 5/20/2020 (DATE) // Eswaranand Vunkatasuhramanian/
Eswaranand VENKATASUBRAMANIAN

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

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SUBSTRATE PROCESSING CHAMBER

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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 conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

PATENT REEL: 057996 FRAME: 0017

- 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, conventional, 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.
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- 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)	([DATE)	Timothy Joseph FRANKLIN
2)	(J	DATE)	Adam FISCHBACH
3)	(I	DATE)	Edward HAYWOOD
4)	(I	DATE)	Abhijit B. MALLICK
5)	([DATE)	Pramit MANNA
6)	(I	DATE)	Carlaton WONG

7)	(DATE)	Stephen C. MORMER Stephen C. GARNER
8)	(DATE)	Eswaranand VENKATASUBRAMANIAN