

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5833085

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	VISHWAS KUMAR PANDEY	10/24/2019
	ERIC KIHARA SHONO	10/24/2019
	KARTIK SHAH	10/24/2019
	CHRISTOPHER S. OLSEN	11/13/2019
	AGUS SOFIAN TJANDRA	11/04/2019
	TOBIN KAUFMAN-OSBORN	10/24/2019
	TAEWAN KIM	11/07/2019
	HANSEL LO	10/24/2019
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:	16662134	
CORRESPONDENCE DATA		
Fax Number:	(713)623-4846	
<i>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.</i>		
Phone:	713-623-4844	
Email:	tfish@pattersonsheridan.com, psdocketing@pattersonsheridan.com	
Correspondent Name:	CHAD DOUGHERTY	
Address Line 1:	24 GREENWAY PLAZA, SUITE 1600	
Address Line 4:	HOUSTON, TEXAS 77046	
ATTORNEY DOCKET NUMBER:	APPM/44015086US	
NAME OF SUBMITTER:	CHAD DOUGHERTY	
SIGNATURE:	/Chad Dougherty/	

DATE SIGNED:	11/21/2019
Total Attachments: 6 source=44015086US02_Assignment#page1.tif source=44015086US02_Assignment#page2.tif source=44015086US02_Assignment#page3.tif source=44015086US02_Assignment#page4.tif source=44015086US02_Assignment#page5.tif source=44015086US02_Assignment#page6.tif	

Atty Dkt No.: 44015086US02

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Vishwas Kumar PANDEY c/o Applied Materials, Inc., Law Dept., M/S 1269 3050 Bowers Avenue Santa Clara, California 95054	2)	Eric Kihara SHONO c/o Applied Materials, Inc., Law Dept., M/S 1269 3050 Bowers Avenue Santa Clara, California 95054
3)	Kartik SHAH c/o Applied Materials, Inc., Law Dept., M/S 1269 3050 Bowers Avenue Santa Clara, California 95054	4)	Christopher S. OLSEN c/o Applied Materials, Inc., Law Dept., M/S 1269 3050 Bowers Avenue Santa Clara, California 95054
5)	Agus Sofian TJANDRA 1556 Hidden Creek Lane Milpitas, California 95035	6)	Tobin KAUFMAN-OSBORN c/o Applied Materials, Inc., Law Dept., M/S 1269 3050 Bowers Avenue Santa Clara, California 95054
7)	Taewan KIM c/o Applied Materials, Inc., Law Dept., M/S 1269 3050 Bowers Avenue Santa Clara, California 95054	8)	Hansel LO c/o Applied Materials, Inc., Law Dept., M/S 1269 3050 Bowers Avenue Santa Clara, California 95054

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

METHOD AND APPARATUS FOR SUPPLYING IMPROVED GAS FLOW TO A PROCESSING VOLUME OF A PROCESSING CHAMBER

for which application for Letters Patent in the United States was filed on October 24, 2019, under Serial No. 16/662,134, 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

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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.

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) 10/24/2019 _____ (DATE)

DocuSigned by:
Vishwas Kumar Pandey

5D46D914C38E417
Vishwas Kumar PANDEY

2) 10/24/2019 _____ (DATE)

DocuSigned by:
Eric Kihara Shono

0124EAD484514DA
Eric Kihara SHONO

3) 10/24/2019 _____ (DATE)

DocuSigned by:
Kartik Shah

111F6E583E1548D
Kartik SHAH

4) 11/13/2019 _____ (DATE)

DocuSigned by:
Christopher S. Olsen

8C0AF4C63B4246E
Christopher S. OLSEN

5) _____ (DATE)

Agus Sofian TJANDRA

6) 10/24/2019 _____ (DATE)

DocuSigned by:
Tobin Kaufman-Osborn

88A0B555AA248C
Tobin KAUFMAN-OSBORN

Atty Dkt No.: 44015086US02

7) 11/7/2019 _____ (DATE)

DocuSigned by:
Taewan Kim
8081F30678D142B
Taewan KIM

8) 10/24/2019 _____ (DATE)

DocuSigned by:
Hansel LO
8081F30678D142B
Hansel LO

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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

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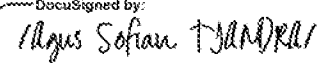
reissue or extension of any of said Patents.

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1)	_____ (DATE)	_____
		Vishwas Kumar PANDEY
2)	_____ (DATE)	_____
		Eric Kihara SHONO
3)	_____ (DATE)	_____
		Kartik SHAH
4)	_____ (DATE)	_____
		Christopher S. OLSEN
5)	11/4/2019 (DATE)	_____
		<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <small>DocuSigned by:</small>  <small>44F6AEEEC950438</small> </div> Agus Sofian TJANDRA
6)	_____ (DATE)	_____
		Tobin KAUFMAN-OSBORN

Atty Dkt No.: 44015086US02

7) _____ (DATE)

Taewan KIM

8) _____ (DATE)

Hansel LO