505020952 07/26/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT5067700 Stylesheet Version v1.2

Otyleander version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
PRAMIT MANNA	07/23/2018
SHISHI JIANG	06/19/2018
ABHIJIT BASU MALLICK	07/25/2018

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15936740

CORRESPONDENCE DATA

Fax Number: (713)623-4846

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.

Phone: 7136234844

Email: hhenderson@pattersonsheridan.com,

psdocketing@pattersonsheridan.com

Correspondent Name: PATTERSON + SHERIDAN, LLP

Address Line 1: 24 GREENWAY PLAZA, SUITE 1600

Address Line 4: HOUSTON, TEXAS 77046

ATTORNEY DOCKET NUMBER: APPM/024908US	
NAME OF SUBMITTER:	B. TODD PATTERSON
SIGNATURE: /B. Todd Patterson/	
DATE SIGNED:	07/26/2018

Total Attachments: 2

source=024908US_ASSIGNMENT_EF#page1.tif source=024908US_ASSIGNMENT_EF#page2.tif

PATENT 505020952 REEL: 046464 FRAME: 0212

Atty Dkt No.: 024908US01

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Pramit MANNA 299 W. Washington Avenue, #421 Sunnyvale, California 94086	2)	Shishi JIANG 3765 Tamarack Ln. #107 Santa Clara, California 95051
3)	Abhijit Basu MALLICK 47863 Masters Court Fremont, California 94539		ł

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

SURFACE MODIFICATION TO IMPROVE AMORPHOUS SILICON GAPFILL

for which application for Letters Patent in the United States was filed on March 27, 2018, under Serial No. 15/936,740, 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.
- 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 filling and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filling 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.

1

Atty Dkt No.: 024908US01

- 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)	7/23/2018 10:28:36 AM CDT (DATE)	Pramit MANNA
2)	6/19/2018 3:46:16 PM CDT (DATE)	Docusigned by: / Shishi Jiang/ 6319C447DF464F1 Shishi JIANG
3)	7/25/2018 2:46:30 PM CDT	Docusigned by: /Abhyit Bash Mallick/ ADDITH HASH MALLICK