PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT6128965

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
XINHAI HAN	10/16/2018
DEENESH PADHI	10/11/2018
ER-XUAN PING	10/13/2018
SRINIVAS GUGGILLA	10/12/2018

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:	16887433

CORRESPONDENCE DATA

Fax Number: (713)623-4846

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psdocketing@pattersonsheridan.com

Correspondent Name: PATTERSON + SHERIDAN, LLP

Address Line 1: 24 GREENWAY PLAZA, SUITE 1600

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ATTORNEY DOCKET NUMBER:	APPM/25233USD01	
NAME OF SUBMITTER:	CHAD M. DOUGHERTY	
SIGNATURE:	/Chad M. Dougherty/	
DATE SIGNED:	05/29/2020	

Total Attachments: 4

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PATENT REEL: 052788 FRAME: 0836

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Xinhai HAN 4411 Laird Circle Santa Clara, California 95054	2)	Deenesh PADHI 776 Shasta Fir Drive Sunnyvale, California 94086
3)	Er-Xuan PING 39541 Canyon Heights Dr. Fremont, California 94539	4)	Srinivas GUGGILLA 3098 Linkfield Way San Jose, California 95135

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

MULTI-LAYER STACK FOR 3D NAND EXTENDIBILITY

for which application for Letters Patent in the United States was filed on October 4, 2018, under Serial No. 16/151,467, 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 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)	10/16/2018 12:25:52 PM CDT 569C3E1FFD8C4A5 Xinhai HAN
2)	10/11/2018 8:32:54 AM CDT Docusigned by: Outsile Pallii —————————————————————————————————
3)	(DATE) Er-Xuan PING
4)	10/12/2018 12:40:43 PM CDT SNWWAS GUGGIUU (DATE)

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1)	(DATE)	
ŕ	, ,	Xinhai HAN
2)	(DATE)	Deenesh PADHI
3)	10/13/2018 6:14:29 PM CI (DATE)	Er-Xuan Ping Er-Xuan Ping Er-Xuan Ping
4)	(DATE)	Sciniune CHCCII I A