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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
VINOD R. PURAYATH	08/11/2014
NITIN K. INGLE	08/14/2014
RANDHIR THAKUR	08/29/2014

RECEIVING PARTY DATA

Name:	Applied Materials, Inc.	
Street Address: 3050 Bowers Avenue		
City: Santa Clara		
State/Country:	tate/Country: CALIFORNIA	
Postal Code: 95054		

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	14452220		

CORRESPONDENCE DATA

Fax Number: (303)571-4321

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: 303-571-4000

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EUGENE J. BERNARD Correspondent Name:

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Address Line 4: SAN FRANCISCO, CALIFORNIA 94111

ATTORNEY DOCKET NUMBER:	A21993/T119000	
NAME OF SUBMITTER:	EUGENE J. BERNARD	
SIGNATURE:	/Eugene J. Bernard/	
DATE SIGNED:	11/07/2014	

Total Attachments: 3

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> **PATENT** REEL: 034130 FRAME: 0254 503053259

Attorney Docket No.: A21993/T119000

AMAT No.: 021993USA/SRP/FRONTIER SUSTAINING/MDD

KTS No.: 80042-911406 (119000US)

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Vinod R. Purayath 106 Palmer Dr.	2)	Nitin K. Ingle 1435 Graywood Dr.
	Los Gatos, CA 95032		San Jose, CA 95129
3)	Randhir Thakur		
	Rt. 44896 Vista Del Sol		
	Fremont, CA 94539		

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

INTEGRATED OXIDE AND NITRIDE RECESS FOR BETTER CHANNEL CONTACT IN 3D ARCHITECTURES

for which application for Letters Patent in the United States was filed on August 5, 2014, under Application No. 14/452,220, 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 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 therefor 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)	August 11	2014	W/K
2)	August 14	2014	Vined R. Purayath
3)		2014	Nitim X Ingle
			Randhir Thakur

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

1)	MANAGEMBA - SULVIVIII	, 2014	Vinod R. Purayath
2)		, 2014	Nitin K. Ingle
3)	8/29/	, 2014	Pulli Nales

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