

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT3979766

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	KAUSHAL K. SINGH	06/28/2016
	DEEPAK JADHAV	06/26/2016
	ASHUTOSH AGARWAL	06/24/2016
	ASHISH GOEL	06/24/2016
	VIJAY PARIHAR	06/27/2016
	ER-XUAN PING	06/30/2016
	RANDHIR P.S. THAKUR	06/30/2016
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:	15188103	
CORRESPONDENCE DATA		
Fax Number:		
<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>		
Email:	cthomas@pattersonsheridan.com, psdocketing@pattersonsheridan.com	
Correspondent Name:	PATTERSON & SHERIDAN, LLP	
Address Line 1:	24 GREENWAY PLAZA	
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Address Line 4:	HOUSTON, TEXAS 77046	
ATTORNEY DOCKET NUMBER:	APPM/22885US	
NAME OF SUBMITTER:	KEITH M. TACKETT	
SIGNATURE:	/Keith M. Tackett/	
DATE SIGNED:	07/27/2016	

Total Attachments: 6

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ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Kaushal K. SINGH 2118 San Rafael Avenue Santa Clara, California 95051	2)	Deepak JADHAV 35, Prasanna Colony Basaveshwarnagar Gokul Road Hubli-580030 INDIA
3)	Ashutosh AGARWAL 34 s-1 Shivam II Indraprasth colony amprapali marg Vaishali Nagar Jaipur-302021 INDIA	4)	Ashish GOEL 74/3 6TH A Main, Malleshpalya New Thipsandra Bangalore-560075 INDIA
5)	Vijay PARIHAR 41521 Joyce Avenue Fremont, California 94539	6)	Er-Xuan PING 39541 Canyon Heights Dr. Fremont, California 94539
7)	Randhir P.S. THAKUR 44969 Vista Del Sol Fremont, California 94539		

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

**METHOD AND APPARATUS FOR MICROWAVE ASSISTED CHALCOGEN RADICALS
GENERATION FOR 2-D MATERIALS**

for which application for Letters Patent in the United States was filed on June 21, 2016, under Serial No. 15/188,103, 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)	<u>6/28/16</u> (DATE)	<u>KK Singh</u> Kaushal K. SINGH
2)	_____ (DATE)	_____ Deepak JADHAV
3)	_____ (DATE)	_____ Ashutosh AGARWAL
4)	_____ (DATE)	_____ Ashish GOEL
5)	<u>6/27/16</u> (DATE)	<u>Vijay Parihar</u> Vijay PARIHAR
6)	<u>06/30/2016</u> (DATE)	<u>Er-Xuan PING</u> Er-Xuan PING
7)	_____ (DATE)	_____ Randhir P.S. THAKUR

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1)	_____ (DATE)	_____
		Kaushal K. SINGH
2)	<u>24th June 2016</u> (DATE)	<u>T. Jadhav</u>
		Deepak JADHAV
3)	<u>24th June-2016</u> (DATE)	<u>Ashu</u>
		Ashutosh AGARWAL
4)	<u>24 June 2016</u> (DATE)	<u>Ashish</u>
		Ashish GOEL
5)	_____ (DATE)	_____
		Vijay PARIHAR
6)	_____ (DATE)	_____
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4)	_____ (DATE)	_____
		Ashish GOEL
5)	_____ (DATE)	_____
		Vijay PARIHAR
6)	_____ (DATE)	_____
		Er-Xuan PING
7)	<u>June 30, 2016</u> (DATE)	<u>R. Thakur</u>
		Randhir P.S. THAKUR