503052487 11/07/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3099087

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
WEI-SHENG LEI	10/28/2014
BRAD EATON	11/05/2014
AJAY KUMAR	11/05/2014
JAMES S. PAPANU	11/05/2014
JUNGRAE PARK	10/28/2014

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:	14167300

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	4887.P1126
NAME OF SUBMITTER:	JUSTIN K. BRASK
SIGNATURE:	/Justin K. Brask/
DATE SIGNED:	11/07/2014

Total Attachments: 2

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PATENT REEL: 034126 FRAME: 0719 503052487

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, the below-named inventor(s):

Wei-Sheng Lei; Brad Eaton; Ajay Kumar; James S. Papanu; Jungrae Park

hereby sell, assign, and transfer to

Applied Materials, Inc.

a Corporation of Delaware, having a principal place of business at 3050 Bowers Avenue, Santa Clara, California 95054 United States ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which for the non-provisional application may have a declaration executed by the undersigned prior hereto or concurrently herewith and which application (provisional or non-provisional) is entitled

WAFER DICING USING HYBRID LASER SCRIBING AND PLASMA ETCH APPROACH WITH MASK PLASMA TREATMENT FOR IMPROVED MASK ETCH RESISTANCE

said patent application also identified as follows (when known):

[I/we hereby authorize an attorney filing date of said patent application when k	•	gnee to inse	rt below the applicati	on number and
United States Patent Application Number	14/167,300	filed _	January 29, 20)14,
and in and to said application (provisiona	al or non-provisional)	and all pro	visional applications	, non-provision

and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

021366/ETCHMMESAMURAI/MDD Page 1 of 2

PATENT REEL: 034126 FRAME: 0720 covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Each Inventor: Please Sign and Date Below:

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Date	Name: Wei-Sheng Lei	
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1//3//7		
Date	Name: Broof Eaton	
11 05/14 Date	- Arai	
Date! /	Name: Ajay Kumar	
1(/5/14	<u> </u>	
Date /	Name: James S. Papanu	
10/28/14		
Date	Name: Jungrae Park	
Date	Name:	
Date	Name:	
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Date	Name:	

RECORDED: 11/07/2014

REEL: 034126 FRAME: 0721