PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3909109

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PATRICK ALA	11/13/2015
BO B. DING	11/18/2015
YONGQI HU	11/03/2015
SIMON YAVELBERG	11/30/2015
MATS LARSSON	10/27/2015

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:	15176998		

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: nholland@pattersonsheridan.com,

psdocketing@pattersonsheridan.com

Correspondent Name: PATTERSON + SHERIDAN, LLP

Address Line 1: 595 SHREWSBURY AVE

Address Line 2: SUITE 100

Address Line 4: SHREWSBURY, NEW JERSEY 07702

NAME OF SUBMITTER: KEITH TABOADA SIGNATURE: /Keith Taboada/ DATE SIGNED: 06/08/2016	ATTORNEY DOCKET NUMBER:	APPM/22607US
	NAME OF SUBMITTER:	KEITH TABOADA
DATE SIGNED: 06/08/2016	SIGNATURE:	/Keith Taboada/
	DATE SIGNED:	06/08/2016

Total Attachments: 6

PATENT REEL: 038847 FRAME: 0184



PATENT REEL: 038847 FRAME: 0185

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Patrick ALA 3201 Loma Verde Dr., Apt. 22 San Jose,	2)	Bo B. DING 1725 Nobil Avenue Santa Clara, California 95051
3)	Yongqi HU 3050 Bowers Avenue Santa Clara, California 95054	4)	Simon YAVELBERG 10355 Plumtree Lane Cupertino, California 95014
5)	Mats LARSSON 1580 Jasper Drive Sunnyvale, California 94087	6)	

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

EXTERNAL CLAMP RING FOR A CHEMICAL MECHANICAL POLISHING CARRIER HEAD

for which application for Letters Patent in the United States was filed on October 16, 2015, under Serial No. 62/242,946, 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

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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)	11/13/2015 (DATE)	
2)	1//8/2015(DATE)	Bo B. DING
3)	(DATE)	
4)	11/29/15 (DATE)	Yongqi HU Sicreon Concl /201
5)	(DATE)	Simon YAVELBERG
		Mats LARSSON

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

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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.

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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)	(DATE)	Patrick ALA
2)	(DATE)	Bo B. DING
3)	11/03/2015 (DATE)	Yongqi HU
4)	(DATE)	Simon YAVELBERG
5)	(DATE)	Mats I ARSSON

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

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3)	Yongqi HU 3050 Bowers Avenue Santa Clara, California 95054	4)	Simon YAVELBERG 10355 Plumtree Lane Cupertino, California 95014
5)	Mats LARSSON 1580 Jasper Drive Sunnyvale, California 94087	6)	

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- 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.

- 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.
- 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)	(DATE)	
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2)	(DATE)	
		Bo B. DING
3)	(DATE)	
		Yongqi HU
4)	(DATE)	
		Simon YAVELBERG
5)	10/27/2015 (DATE)	Metodamon
		Mats I. LARSSON

PATENT REEL: 038847 FRAME: 0191

RECORDED: 06/08/2016