506302915 10/14/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6349664

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Haosheng Wu	08/04/2020
Jianshe Tang	07/27/2020
Hari Soundararajan	07/27/2020
Shou-Sung Chang	08/03/2020
Paul D. Butterfield	07/27/2020
Hui Chen	10/08/2020
Chih Chung Chou	07/27/2020
Alexander John Fisher	08/24/2020

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:	16886238

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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: (650) 839-5070

Email: wamsley@fr.com, apsi@fr.com

Correspondent Name: DAVID J. GOREN

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	05542-1331001
NAME OF SUBMITTER:	JEMMA WAMSLEY
SIGNATURE:	/Jemma Wamsley/

506302915 PATENT REEL: 054052 FRAME: 0505

DATE SIGNED: 10/14/2020

Total Attachments: 3
source=Assignment_05542-1331001#page1.tif
source=Assignment_05542-1331001#page2.tif
source=Assignment_05542-1331001#page3.tif

PATENT REEL: 054052 FRAME: 0506

Case # 44016619US02/CMP/05542-1331001

ASSIGNMENT FOR APPLICATION FOR PATENT

David D. Duttardiala

WHEREAS:

Names and Addresses of Inventors:

Haosheng Wu 80 Descanso Dr., Unit 3201 San Jose, CA 95134
Jianshe Tang 6203 Lean Avenue San Jose, CA 95123
Hari Soundararajan 1220 Vienna Drive, #491 Sunnyvale, CA 94089
Shou-Sung Chang 1553 Alison Ave Mountain View, CA 94040

Paul D. Butterfield
1684 Kevin Drive
San Jose, CA 95124
Hui Chen
2146 Paseo Del Oro
San Jose, CA 95124
Chih Chung Chou
Chih Chung Chou 329 Ribbonwood Avenue
•
329 Ribbonwood Avenue
329 Ribbonwood Avenue San Jose, CA 95123
329 Ribbonwood Avenue San Jose, CA 95123 Alexander John Fisher

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

USE OF STEAM FOR PRE-HEATING OF CMP COMPONENTS for which application for Letters Patent in the United States was filed on 5/28/2020, under Serial

No. 16/886,238, 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 the Application), and the invention disclosed therein (hereinafter referred to as the 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 the 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

PATENT REEL: 054052 FRAME: 0507 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.

Date:	8/4/2020	Haosheng Wu
_		HAOSHENG WÜ
Date:	7/27/2020	Jianshe Tang
		JIANSHE TANG
Date:	7/27/2020	Hari Soundararayan
		HARI SOUNDARARAJAN
Date:	8/3/2020	Show-Sung Chang
		SHOU-SUNG CHANG
Date:	7/27/2020	Paul D. Butterfield
_		PAUL D. BUTTERFIELD
Date:	10/8/2020	thi Chen
_		HUI CHEN
Date:	7/27/2020	Chile Chung
		CHIH CHUNG CHOU

Date:	8/24/2020	Alex Lisher
		ALEXANDER JOHN FISHER

62387017.doc

RECORDED: 10/14/2020

PATENT REEL: 054052 FRAME: 0509