#### 503713976 02/29/2016

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3760617

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
MARK TASKAR	04/01/2015
IQBAL SHAREEF	04/01/2015
ANTHONY ZEMLOCK	04/02/2015
RYAN BISE	10/25/2014
NATHAN KUGLAND	10/22/2014

#### **RECEIVING PARTY DATA**

Name:	LAM RESEARCH CORPORATION
Street Address:	4650 CUSHING PARKWAY
City:	FREMONT
State/Country:	CALIFORNIA
Postal Code:	94538

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14886458

#### **CORRESPONDENCE DATA**

Fax Number: (703)836-2021

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.

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**Correspondent Name:** BUCHANAN, INGERSOLL & ROONEY PC

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Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	1015290-001310
NAME OF SUBMITTER:	PETER K. SKIFF
SIGNATURE:	/Peter K. Skiff/
DATE SIGNED:	02/29/2016
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**Total Attachments: 9** 

**PATENT** REEL: 037851 FRAME: 0983

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PATENT REEL: 037851 FRAME: 0984

## ASSIGNMENT (JOINT)

THIS ASSIGNMENT, by 1) Mark Taskar, 2) Iqbal Shareef, 3) Anthony Zemlock, 4) Ryan Bise and 5) Nathan Kugland, residing at 1) 1658 De Anza Boulevard, San Mateo, CA 94538, 2) 4055 Heron Place, Fremont, CA 94555, 3) 16072 Tsirelas Drive, Tracy, CA 95304, 4) 218 Tait Avenue, #2, Los Gatos, CA 95030 and 5) 142 Caldecott Lane, #2, Oakland, CA 94618 (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in <u>GAS SUPPLY DELIVERY ARRANGEMENT INCLUDING A GAS SPLITTER FOR TUNABLE GAS FLOW CONTROL</u> set forth in a provisional application for Letters Patent of the United States, □ which is an application to be filed herewith; □ which is a provisional application having an oath or declaration executed on even date herewith prior to filing of application; ■ bearing Application No. <u>62/065,497</u>, and filed on <u>October 17, 2014</u>; and

WHEREAS, LAM RESEARCH CORPORATION, a corporation duly organized under and pursuant to the laws of Delaware and having its principal place of business at 4650 Cushing Parkway, Fremont, CA 94538 (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

Attorney Dkt. No.: 1015290-001279

Lam Dkt No.: 3548 & 3549US

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Buchanan Ingersoll & Rooney PC of Alexandria, Virginia to insert in the spaces provided above the filing date, application number, and attorney docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date 04/01/15 Signature of Assignor M

Signature of Assignor \_\_\_\_\_

2 of 3

		Attorney Dkt. No.: 1015290-001279
, / /		Lam Dkt No.: 3548 & 3549US
Date 4/2/15	Signature of Assignor	Anthony & Soulock
Date	Signature of Assignor	D. D.
		Ryan Bise
Date	Signature of Assignor	
		Nathan Kugland

### ASSIGNMENT (JOINT)

THIS ASSIGNMENT, by 1) Mark Taskar, 2) Iqbal Shareef, 3) Anthony Zemlock, 4) Ryan Bise and 5) Nathan Kugland, residing at 1) 1658 De Anza Boulevard, San Mateo, CA 94538, 2) 4055 Heron Place, Fremont, CA 94555, 3) 16072 Tsirelas Drive, Tracy, CA 95304, 4) 218 Tait Avenue, #2, Los Gatos, CA 95030 and 5) 142 Caldecott Lane, #2, Oakland, CA 94618 (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in <u>GAS</u> <u>SUPPLY DELIVERY ARRANGEMENT INCLUDING A GAS SPLITTER FOR TUNABLE</u> <u>GAS FLOW CONTROL</u> set forth in a provisional application for Letters Patent of the United States, □ which is an application to be filed herewith; □ which is a provisional application having an oath or declaration executed on even date herewith prior to filing of application; ■ bearing Application No. <u>62/065,497</u>, and filed on <u>October 17, 2014</u>; and

WHEREAS, LAM RESEARCH CORPORATION, a corporation duly organized under and pursuant to the laws of Delaware and having its principal place of business at 4650 Cushing Parkway, Fremont, CA 94538 (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Buchanan Ingersoll & Rooney PC of Alexandria, Virginia to insert in the spaces provided above the filing date, application number, and attorney docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date	Signature of Assignor	
	·	Mark Taskar
Date	Signature of Assignor	
	· ·	Iqbal Shareef

Date		Signature of Assignor		
– Date _	10/25/14	Signature of Assignor	Anthony Zemlock Ryan Bise	Si,
Date_		Signature of Assignor	Nathan Kugland	

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Date	Signature of Assignor	
		Mark Taskar
Date	Signature of Assignor	
	•	Iqbal Shareef

Date Signature of Assignor Anthony Zemlock

Date Signature of Assignor Ryan Bise

Date 2014-10-22 Signature of Assignor Meshant Kunsland