PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5371856

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LAMBDA TECHNOLOGIES, INC.	04/27/2015

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:	16246773

CORRESPONDENCE DATA

Fax Number: (732)935-7122

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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Email: lzaveta@mtiplaw.com
Correspondent Name: MOSER TABOADA/ALAN TABOADA
Address Line 1: 1030 BROAD STREET
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Address Line 4: SHREWSBURY, NEW JERSEY 07702

ATTORNEY DOCKET NUMBER:	APPM23175D1
NAME OF SUBMITTER:	ALAN TABOADA
SIGNATURE:	/ALAN TABOADA/
DATE SIGNED:	02/12/2019

Total Attachments: 7
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AMENDMENT NO. 1 TO THE
IP PURCHASE AND LICENSE AGREEMENT
Dated June 24, 2014

Whereas Lambda Technologies, Inc., a corporation under the laws of Delaware, having its principal place of business at 860 Aviation Parkway, Suite 900, Morrisville, North Carolina 27560, U.S.A. ("Lambda"), and Applied Materials, Inc., a corporation incorporated under the laws of Delaware, having its principal place of business at 3050 Bowers Avenue, Santa Clara, California 95052, U.S.A. ("Applied"), entered into an IP Purchase and License Agreement ("Agreement") dated June 24, 2014, wherein each is referred to herein as a "Party" and collectively as the "Parties;"

Whereas the Parties previously executed a Patent Assignment dated July 29, 2014 conforming substantially to Exhibit C of the Agreement, and subsequently identified errors in or other reasons to re-execute that patent assignment document and its Schedule A; and

Whereas the Parties desire and intend to amend the Agreement pursuant to Section 8.6 thereof as set forth below (this Amendment),

The Parties hereby agree as follows:

(1) The patent assignment document identified in Section 2.1(b) and attached to the Agreement as Exhibit C (including the version executed on July 29, 2014 identified above), and its corresponding Schedule A, shall be replaced by the Patent Assignment form attached to this Amendment along with its corresponding revised Schedule A.

(2) This Amendment is solely to provide an Assignment form for recording and perfecting the assignment of the LT Patents as previously granted, and does not alter the assignment or grant of those patent rights by Lambda to Applied as set forth and recited in the Agreement.

(3) The Parties mutually waive and release each other from any claims or causes of action arising out of the promptness of execution of this patent assignment document under Section 2.1(b) of the Agreement.

In Witness Whereof, the Parties have executed this Agreement in duplicate originals by their proper officers as of the date and year first above written.

LAMBDA TECHNOLOGIES, INC.	APPLIED MATERIALS, INC.
By: [signature]	By: [signature]
Name: RICHARD S. GARARD	Name: SUNDAR RAMAMURTHY
Title: PRESIDENT & CEO	Title: Vice President & GM
Date: 4/29/15	Date: 4/29/15

PATENT ASSIGNMENT

This Assignment is made effective as of June 24, 2014 by and between **LAMBDA TECHNOLOGIES, INC.**, a corporation under the laws of Delaware, having its principal place of business at 860 Aviation Parkway, Suite 900, Morrisville, North Carolina 27560, U.S.A. ("**Assignor**") and **APPLIED MATERIALS, INC.**, a Delaware corporation with a place of business at 3050 Bowers Avenue, Santa Clara, California 95054, U.S.A. ("**Assignee**"), Assignor and Assignee having entered into a IP Purchase and License Agreement dated June 24, 2014.

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged:

1. Assignor has and does hereby sell, assign, transfer and convey to Assignee its entire right, title and interest in and to any and all of the following (collectively, the "Patent Rights"):

(a) all patents and patent applications listed in **Schedule A** (each an "Assigned Patent") and the inventions disclosed and claimed therein;

(b) all rights to apply in any and all countries of the world for patents, certificates of invention, utility models, or other governmental grants of rights with respect to any Assigned Patent or invention disclosed and claimed therein, including the right to apply for patents pursuant to any convention, treaty, agreement or understanding;

(c) each resulting patent, patent application, and other governmental grant of rights issued on any Assigned Patent, including, without limitation, each related provisional, continuation, continuation-in-part, divisional, reexamination, reissue, or substitute of any of the foregoing in any jurisdiction anywhere in the world (for purposes of this clause, "related" means, with respect to any patent, patent application, or other governmental grant of rights, that such patent, patent application, or other governmental grant of rights is entitled to claim the benefit of priority from an Assigned Patent, or that an Assigned Patent is entitled to claim the benefit of priority from such patent, patent application, or other governmental grant of rights); and

(d) all accrued causes of action, and the right to sue and recover damages, for future or past infringements of the Patent Rights.

2. Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein.

3. Assignor hereby authorizes and requests the attorney or agent of record to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the respective patent office or governmental agency in each jurisdiction for recordation or other official recognition.

Signature page follows

LAMBDA TECHNOLOGIES, INC.,

By: [signature]

Name: RICHARD S GARRARD

Title: PRESIDENT & CEO

Date: 4/27/15

STATE OF NORTH CAROLINA)
) ss.
COUNTY OF ~~DURHAM~~ Wake)

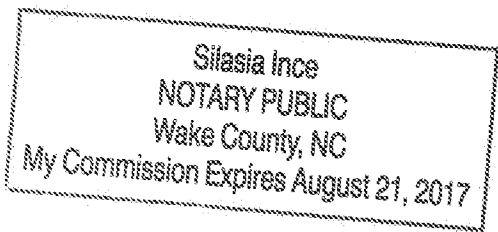
On the 27th day of April, 2015 before me, Silasia Ince,

personally appeared Richard S. Garard, who proved to me on the basis of satisfactory evidence to be the persons whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of North Carolina that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

[signature]
Signature of Notary Public



Schedule A attached (4 pages)

Schedule A – Assigned Patents and Applications

Country	Patent/Publ. No.*	Grant/Publ. Date*	Application No.	Application Date	Title**
United States	N/A***	N/A	61/854,556	April 26, 2013	Method And Apparatus For Microwave Treatment Of Dielectric Films
United States	N/A	N/A	61/694,748	January 13, 2014	Method For Microwave Processing Of Photosensitive Polyimides
United States	N/A	N/A	14/544,482	January 12, 2015	Method for Microwave Processing of Photosensitive Polyimides
United States	2014/0322912	October 30, 2014	14/120,010	April 15, 2014	Method And Apparatus For Microwave Treatment For Dielectric Films
United States	2014/0322921	October 30, 2014	14/120,013	April 15, 2014	Method And Apparatus For Microwave Treatment For Dielectric Films
United States	2014/0319129	October 30, 2014	14/120,011	April 15, 2014	Method And Apparatus For Microwave Treatment For Dielectric Films
United States	2014/0305934	October 16, 2014	13/986,250	April 16, 2013	Method And Apparatus For Controlled Broadband Microwave Heating
United States	2013/0302917	November 14, 2013	13/506,722	May 11, 2012	Method For Lower Thermal Budget Multiple Cures In Semiconductor Packaging
United States	2013/0299953	November 14, 2013	13/506,723	May 11, 2012	Method For Lower Thermal Budget Multiple Cures In Semiconductor Packaging
United States	2014/0284821	September 25, 2014	13/986,012	March 22, 2013	Method Of Curing Thermoplastics With Microwave Energy
United States	2011/0226759	September 22, 2011	13/065,606	March 25, 2011	Apparatus And Method For Heating Semiconductor Wafers Via Microwaves
United States	2007/0215607	September 20, 2007	11/715,548	March 8, 2007	Apparatus And Method For Heating Semiconductor Wafers Via Microwaves
United States	2014/0103030	April 17, 2014	13/573,947	October 15, 2012	Apparatus And Methods For Heat Treatment Of Coating On Substrates
United States	5,644,837	July 8, 1997	08/497,019	June 30, 1995	Process For Assembling Electronics Using Microwave Irradiation
United States	5,646,038	July 15, 1997	08/531,045	September 20, 1995	Systems And Methods For Monitoring Material Properties Using Microwave Energy
United States	5,738,915	April 14, 1998	08/716,043	September 19, 1996	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
United States	5,750,968	May 12, 1998	08/497,603	June 30, 1995	System And Apparatus For Reducing Arcing And Localized Heating During Microwave Processing
United States	5,798,395	August 25, 1998	08/626,207	March 29, 1996	Adhesive Bonding Using Variable Frequency Microwave Energy
United States	5,804,801	September 8, 1998	08/816,162	March 12, 1997	Adhesive Bonding Using Variable Frequency Microwave Energy
United States	5,844,216	December 1, 1998	08/908,398	August 7, 1997	System And Apparatus For Reducing Arcing And Localized Heating During Microwave Processing

PATENT
REEL: 048309 FRAME: 0871

Schedule A – Assigned Patents and Applications

United States	5,879,756	March 9, 1999	08/947,945	October 9, 1997	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
United States	6,103,812	August 15, 2000	08/964,139	November 6, 1997	Microwave Curable Adhesive
United States	6,312,548	November 6, 2001	08/625,752	March 29, 1996	Conductive Insert For Bonding Components With Microwave Energy
United States	7,939,456	May 10, 2011	12/924,004	September 17, 2010	Method And Apparatus For Uniform Microwave Treatment Of Semiconductor Wafers
United States	8,021,898	September 20, 2011	12/807,994	September 17, 2010	Method And Apparatus For Controlled Thermal Processing
Australia	AU6400196	February 5, 1997	AU1996000064001	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation
Australia	AU6972996	April 9, 1997	AU1996000069729	September 11, 1996	Systems And Methods For Monitoring Material Properties Using Microwave Energy
Australia	AU4183297	April 14, 1998	AU1997000041832	September 5, 1997	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
Australia	AU6400396	February 5, 1997	AU1996000064003	June 27, 1996	System And Apparatus For Reducing Arcing And Localized Heating During Microwave Processing
Australia	AU2586397	October 22, 1997	AU19970025863	March 21, 1997	Adhesive Bonding Using Variable Frequency Microwave Energy
Australia	AU111289	May 31, 1999	AU1998199911128	October 21, 1998	Microwave Curable Adhesive
Australia	AU2539597	October 22, 1997	AU1997000025395	March 21, 1997	Conductive Insert For Bonding Components With Microwave Energy
Austria	AT190459	March 15, 2000	AT19960923510	June 27, 1996	Procedure For The Electronics Assembly Using Microwave Irradiation
Austria	AT0243078	July 15, 2003	AT1997000939826	September 5, 1997	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
Austria	AT232779	March 15, 2003	AT19970917578	March 21, 1997	Adhesive Bonding Using Variable Frequency Microwave Energy
Austria	AT267680	June 15, 2004	AT20010119503	March 21, 1997	Adhesive Bonding Using Variable Frequency Microwave Energy
Canada	CA2222703	February 12, 2002	CA1996002222703	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation
EPO	EP0836796	March 8, 2000	EP96923510	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation
EPO	EP0930943	June 18, 2003	EP19970939826	September 5, 1997	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
EPO	EP0889775	February 19, 2003	EP19970917578	March 21, 1997	Heating Of Composites Using Microwave Energy
EPO	EP1155798	May 26, 2004	EP20010119503	March 21, 1997	Adhesive Bonding Using Variable Frequency Microwave Energy

Schedule A – Assigned Patents and Applications

France	FR0836796	March 8, 2000	EP96923510	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation
France	FR0930943	June 18, 2003	EP19970939826	September 5, 1997	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
Germany	DE 696 07 004	March 8, 2000	696 07 004.9	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation
Germany	DE 697 19 172	February 19, 2003	697 19 172.9	March 21, 1997	Adhesive Bonding Using Variable Frequency Microwave Energy
Germany	DE 697 29 335	May 26, 2004	697 29 335.1	March 21, 1997	Adhesive Bonding Using Variable Frequency Microwave Energy
Germany	DE 697 22 946	June 18, 2003	697 22 946.7	September 5, 1997	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
Great Britain	GB0836796	March 8, 2000	EP96923510	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation
Great Britain	GB0930943	June 18, 2003	EP19970939826	September 5, 1997	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
Ireland	IE0836796	March 8, 2000	EP96923510	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation
Italy	IT0930943	June 18, 2003	EP19970939826	September 5, 1997	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
Japan	JP3021667	March 15, 2000	JP19970505227	June 27, 1996	Process for assembling electronics using microwave irradiation
Japan	JP3414755	April 4, 2003	JP1997536449	April 4, 1997	Curing liquid resin encapsulants of microelectronics components with microwave energy
Korea	KR1003401770000	May 28, 2002	KR199700709943	06/27/01996	Process For Assembling Electronics Using Microwave Irradiation
Mexico	MX204121	November 29, 1998	PA/a/1998/000058	June 27, 1996	Process for assembling electronics using microwave irradiation
Netherlands	NL0836796	March 8, 2000	EP96923510	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation
Netherlands	NL0930943	June 18, 2003	EP19970939826	September 5, 1997	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
PCT	WO/1997/002725	January 23, 1997	PCT/US1996/011040	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation
PCT	WO/1997/011357	March 27, 1997	PCT/US1996/014532	September 11, 1996	Systems And Methods For Monitoring Material Properties Using Microwave Energy
PCT	WO/1998/012000	March 26, 1998	PCT/US1997/015710	September 5, 1997	Curing Polymer Layers On Semiconductor Substrates Using Variable Frequency Microwave Energy
PCT	WO/1997/002726	January 23, 1997	PCT/US1996/011043	June 27, 1996	System And Apparatus For Reducing Arcing And Localized Heating During Microwave Processing
PCT	WO/1997/36728	October 9, 1997	PCT/US1997/004609	March 21, 1997	Adhesive Bonding Using Variable Frequency Microwave Energy

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REEL: 048309 FRAME: 0873

Schedule A – Assigned Patents and Applications

PCT	WO/1999/024520	May 20, 1999	PCT/US1998/022329	October 21, 1998	Microwave Curable Adhesive
PCT	WO/1997/036965	October 9, 1997	PCT/US1997/004583	March 21, 1997	Conductive Insert For Bonding Components With Microwave Energy
PCT	WO/2014/062619	April 24, 2014	PCT/US2013/064944	October 15, 2013	Apparatus And Methods For Heat Treatment Of Coating On Substrates
PCT	WO/2014/0172104	October 23, 2014	PCT/US2014/032741	April 3, 2014	Method And Apparatus For Controlled Broadband Microwave Heating
PCT	WO/2014/0153336	September 25, 2014	PCT/US2014/031015	March 18, 2014	Method Of Curing Thermoplastics With Microwave Energy
PCT	WO/1997/038441	October 16, 1997	PCT/US1997/005828	April 4, 1997	Curing Liquid Resin Encapsulants Of Microelectronics Components With Microwave Energy
Singapore	SG51095	January 25, 2000	SG1997058846	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation
Switzerland	CH0836796	March 8, 2000	EP96923510	June 27, 1996	Process For Assembling Electronics Using Microwave Irradiation

* Patent numbers and grant dates are listed where available, otherwise publication numbers (Publ. No.) and publication dates (Publ. Date) are listed.
** English language titles correspond to the first filed cases or Assignee's docket records, and may not match the English or foreign language titles of the applications as pending or published and/or patents as granted.
***N/A = Not available or not yet applicable.

RECORDED: 02/12/2019

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