

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6238783

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Gang Yu	08/04/2020
Chung-Chia Chen	02/13/2020
Wan-Yu Lin	03/06/2020
Hyunsung Bang	04/20/2020
Lisong Xu	03/04/2020
Byung Sung Kwak	02/28/2020
Robert Jan Visser	02/11/2020
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:	16685968
CORRESPONDENCE DATA	
Fax Number:	(877)769-7945
<i>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.</i>	
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:	05542-1418001
NAME OF SUBMITTER:	JEMMA WAMSLEY
SIGNATURE:	/Jemma Wamsley/
DATE SIGNED:	08/06/2020

PATENT

Total Attachments: 14

source=ExecutedAssignment1418001#page1.tif
source=ExecutedAssignment1418001#page2.tif
source=ExecutedAssignment1418001#page3.tif
source=ExecutedAssignment1418001#page4.tif
source=ExecutedAssignment1418001#page5.tif
source=ExecutedAssignment1418001#page6.tif
source=ExecutedAssignment1418001#page7.tif
source=ExecutedAssignment1418001#page8.tif
source=ExecutedAssignment1418001#page9.tif
source=ExecutedAssignment1418001#page10.tif
source=ExecutedAssignment1418001#page11.tif
source=ExecutedAssignment1418001#page12.tif
source=ExecutedAssignment1418001#page13.tif
source=ExecutedAssignment1418001#page14.tif

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

Gang Yu 810 Poinsettia Way Santa Barbara, CA 93111	Lisong Xu 750 N. King Rd. #101 San Jose, CA 95133
Chung-Chia Chen 16F.-4, No. 683, Zhongzheng Rd. Zhonghe Dist., New Taipei City 235 Taiwan (R.O.C.)	Byung Sung Kwak 9723 NW Henry Ct. Portland, OR 97229
Wan-Yu Lin 3F-1, No.3, Lane 608, Bei-An Road Taipei City, 104, Taiwan (R.O.C.)	Robert Jan Visser 2320 Eastridge Avenue Menlo Park, CA 94025
Hyunsung Bang Am Dreispitz 28 63741 Aschaffenburg Germany	

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

ORGANIC LIGHT-EMITTING DIODE LIGHT EXTRACTION LAYER HAVING GRADED INDEX OF REFRACTION

for which application for Letters Patent in the United States was filed on 11/15/2019, under Serial

No. 16/685,968, 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 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:

GANG YU

Date:

13.02.2020

Chung-Chia Chen
CHUNG-CHIA CHEN

Date:

WAN-YU LIN

Date:

HYUNSUNG BANG

Date:

LISONG XU

Date:

BYUNG SUNG KWAK

Date:

ROBERT JAN VISSER

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

Gang Yu 810 Poinsettia Way Santa Barbara, CA 93111	Lisong Xu 750 N. King Rd. #101 San Jose, CA 95133
Chung-Chia Chen 16F.-4, No. 683, Zhongzheng Rd. Zhonghe Dist., New Taipei City 235 Taiwan (R.O.C.)	Byung Sung Kwak 9723 NW Henry Ct. Portland, OR 97229
Wan-Yu Lin 3F-1, No.3, Lane 608, Bei-An Road Taipei City, 104, Taiwan (R.O.C.)	Robert Jan Visser 2320 Eastridge Avenue Menlo Park, CA 94025
Hyunsung Bang Am Dreispitz 28 63741 Aschaffenburg Germany	

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

ORGANIC LIGHT-EMITTING DIODE LIGHT EXTRACTION LAYER HAVING GRADED INDEX OF REFRACTION

for which application for Letters Patent in the United States was filed on 11/15/2019, under Serial

No. 16/685,968, 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 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:

GANG YU

Date:

CHUNG-CHIA CHEN

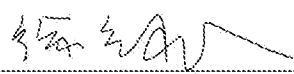
Date:

WAN-YU LIN

Date:

HYUNSUNG BANG

Date: 3/4/2020



LISON XU

Date:

BYUNG SUNG KWAK

Date:

ROBERT JAN VISSER

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

Gang Yu
810 Poinsettia Way
Santa Barbara, CA 93111

Chung-Chia Chen
16F-4, No. 683, Zhongzheng Rd.
Zhonghe Dist., New Taipei City 235
Taiwan (R.O.C.)

Wen-Yu Lin
3F-1, No. 3, Lane 608, Bei-An Road
Taipei City, 104, Taiwan (R.O.C.)

Hyunsung Bang
Am Dreispitz 28
63741 Aschaffenburg
Germany

Lisong Xu
750 N. King Rd. #101
San Jose, CA 95133

Byung Sung Kwak
9723 NW Henry Ct.
Portland, OR 97229

Robert Jan Visser
2320 Eastridge Avenue
Menlo Park, CA 94025

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

ORGANIC LIGHT-EMITTING DIODE LIGHT EXTRACTION LAYER HAVING GRADED INDEX OF REFRACTION

for which application for Letters Patent in the United States was filed on 11/15/2019, under Serial No. 16/685,968, 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 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: _____
GANG YU

Date: _____
CHUNG-CHIA CHEN

Date: 2020.03.06
Lin Wan-yu
WANYU LIN

Date: _____
HYUNSUNG BANG

Date: _____
LISONG XU

Date: _____
BYUNG SUNG KWAK

Date: _____
ROBERT JAN VISSER

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

Gang Yu 810 Poinsettia Way Santa Barbara, CA 93111
Chung-Chia Chen 16F-4, No. 683, Zhongzheng Rd. Zhonghe Dist., New Taipei City 235 Taiwan (R.O.C.)
Wan-Yu Lin 3F-1, No.3, Lane 608, Bei-An Road Taipei City, 104, Taiwan (R.O.C.)
Hyunsung Bang Am Dreispitz 28 63741 Aschaffenburg Germany

Lisong Xu 750 N. King Rd. #101 San Jose, CA 95133
Byung Sung Kwak 9723 NW Henry Ct. Portland, OR 97229
Robert Jan Visser 2320 Eastridge Avenue Menlo Park, CA 94025

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

ORGANIC LIGHT-EMITTING DIODE LIGHT EXTRACTION LAYER HAVING GRADED INDEX OF REFRACTION

for which application for Letters Patent in the United States was filed on 11/15/2019, under Serial

No. 16/685,968, 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 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:

GANG YU

Date:

CHUNG-CHIA CHEN

Date:

WAN-YU LIN

Date:

HYUNSUNG BANG

Date:

LISONG XU

Date:

BYUNG SUNG KWAK

Date:

2/11/20

ROBERT JAN VISSER

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

Gang Yu 810 Poinsettia Way Santa Barbara, CA 93111
Chung-Chia Chen 16F.-4, No. 683, Zhongzheng Rd. Zhonghe Dist., New Taipei City 235 Taiwan (R.O.C.)
Wan-Yu Lin 3F-1, No.3, Lane 608, Bei-An Road Taipei City, 104, Taiwan (R.O.C.)
Hyunsung Bang Am Dreispitz 28 63741 Aschaffenburg Germany

Lisong Xu 750 N. King Rd. #101 San Jose, CA 95133
Byung Sung Kwak 9723 NW Henry Ct. Portland, OR 97229
Robert Jan Visser 2320 Eastridge Avenue Menlo Park, CA 94025

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

ORGANIC LIGHT-EMITTING DIODE LIGHT EXTRACTION LAYER HAVING GRADED INDEX OF REFRACTION

for which application for Letters Patent in the United States was filed on 11/15/2019, under Serial No. 16/685,968, 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 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:

GANG YU

Date:

CHUNG-CHIA CHEN

Date:

WAN-YU LIN

Date:

HYUNSUNG BANG

Date:

LISONG XU

Date:

2/28/2020

BYUNG SUNG KWAK

Date:

ROBERT JAN VISSER

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

Gang Yu 810 Poinsettia Way Santa Barbara, CA 93111	Lisong Xu 750 N. King Rd. #101 San Jose, CA 95133
Chung-Chia Chen 16F.-4, No. 683, Zhongzheng Rd. Zhonghe Dist., New Taipei City 235 Taiwan (R.O.C.)	Byung Sung Kwak 9723 NW Henry Ct. Portland, OR 97229
Wan-Yu Lin 3F-1, No.3, Lane 608, Bei-An Road Taipei City, 104, Taiwan (R.O.C.)	Robert Jan Visser 2320 Eastridge Avenue Menlo Park, CA 94025
Hyunsung Bang Am Dreispitz 28 63741 Aschaffenburg Germany	

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

ORGANIC LIGHT-EMITTING DIODE LIGHT EXTRACTION LAYER HAVING GRADED INDEX OF REFRACTION

for which application for Letters Patent in the United States was filed on 11/15/2019, under Serial

No. 16/685,968, 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 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:

GANG YU

Date:


CHUNG-CHIA CHEN

Date:

WAN-YU LIN

Date:

4 / 20 / 2020


HYUNSUNG BANG

Date:

LISONG XU

Date:

BYUNG SUNG KWAK

Date:

ROBERT JAN VISSER

Case # 44017298US03/ATG/05542-1418001

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

Gang Yu 810 Poinsettia Way Santa Barbara, CA 93111	Lisong Xu 750 N. King Rd. #101 San Jose, CA 95133
Chung-Chia Chen 16F.-4, No. 683, Zhongzheng Rd. Zhonghe Dist., New Taipei City 235 Taiwan (R.O.C.)	Byung Sung Kwak 9723 NW Henry Ct. Portland, OR 97229
Wan-Yu Lin 3F-1, No.3, Lane 608, Bei-An Road Taipei City, 104, Taiwan (R.O.C.)	Robert Jan Visser 2320 Eastridge Avenue Menlo Park, CA 94025
Hyunsung Bang Am Dreispitz 28 63741 Aschaffenburg Germany	

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

ORGANIC LIGHT-EMITTING DIODE LIGHT EXTRACTION LAYER HAVING GRADED INDEX OF REFRACTION

for which application for Letters Patent in the United States was filed on 11/15/2019, under Serial

No. 16/685,968, 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 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



GANG YU

Date: _____

CHUNG-CHIA CHEN

Date: _____

WAN-YU LIN

Date: _____

HYUNSUNG BANG

Date: _____

LISONG XU

Date: _____

BYUNG SUNG KWAK

Date: _____

ROBERT JAN VISSER