

PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SANDEEP NIJHAWAN	05/11/2010
BRIAN H. BURROWS	04/16/2010
TETSUYA ISHIKAWA	04/19/2010
OLGA KRYLIOUK	04/13/2010
ANAND VASUDEV	04/14/2010
JIE SU	04/13/2010
DAVID Q. QUACH	04/13/2010
ANZHON CHANG	04/13/2010
YURIY MELNIK	01/13/2010
HARSUKHDEEP S. RATIA	04/14/2010
SON T. NGUYEN	04/13/2010
LILY PANG	04/13/2010

RECEIVING PARTY DATA

Name:	APPLIED MATERIALS, INC.
Street Address:	P.O. BOX 450A
Internal Address:	LEGAL AFFAIRS DEPT.
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95052

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12751692

CORRESPONDENCE DATA

Fax Number: (408)986-3090

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 408-563-2726

501204044

PATENT
REEL: 024532 FRAME: 0635

CH \$40.00 12751692

Email: robert_mulcahy@contractor.amat.com
Correspondent Name: Robert W. Mulcahy
Address Line 1: P.O. BOX 450A
Address Line 2: LEGAL AFFAIRS DEPT.
Address Line 4: SANTA CLARA, CALIFORNIA 95052

ATTORNEY DOCKET NUMBER:	AM14349/AEP/ESONG
-------------------------	-------------------

NAME OF SUBMITTER:	ROBERT W MULCAHY
--------------------	------------------

Total Attachments: 12

source=14349 US-ASG 2010-06-09#page1.tif
source=14349 US-ASG 2010-06-09#page2.tif
source=14349 US-ASG 2010-06-09#page3.tif
source=14349 US-ASG 2010-06-09#page4.tif
source=14349 US-ASG 2010-06-09#page5.tif
source=14349 US-ASG 2010-06-09#page6.tif
source=14349 US-ASG 2010-06-09#page7.tif
source=14349 US-ASG 2010-06-09#page8.tif
source=14349 US-ASG 2010-06-09#page9.tif
source=14349 US-ASG 2010-06-09#page10.tif
source=14349 US-ASG 2010-06-09#page11.tif
source=14349 US-ASG 2010-06-09#page12.tif

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Sandeep Nijhawan 1024 Seena Avenue Los Altos, California 94026	2)	Brian H. Burrows 1532 Bouchard Drive San Jose, California 95118
3)	Tetsuya Ishikawa 20072 Kilbride Drive Saratoga, California 95070	4)	Olga Kryliouk 315 E Washington Avenue Sunnyvale, California 94086
5)	Anand Vasudev 4 Elizabeth Street San Francisco, California 94110	6)	Jie Su 620 Park View Drive Santa Clara, California 95054
7)	David H. Quach 1205 Swinging Gate Court San Jose, California 95120	8)	Anzhong Chang 5847 Randleswood Court San Jose, California 95129
9)	Yuriy Melnik 3760 Tamarack Lane, Apt. 26 Santa Clara, California 95051	10)	Harsukhdeep S. Ratia 3354 Marchese Court Santa Clara, California 95051
11)	Son T. Nguyen 3032 Dow Drive San Jose, California 95136	12)	Lily Pang 35694 Cabrillo Drive Fremont, California 94536

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

CLUSTER TOOL FOR LEDS

for which application for Letters Patent in the United States was filed on March 31, 2010, under Serial No. 12/751,692, 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 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)	<u>5/11/07</u> (DATE)	<u></u> Sandeep Nijhawan
2)	_____ (DATE)	_____ Brian H. Burrows
3)	_____ (DATE)	_____ Tetsuya Ishikawa
4)	_____ (DATE)	_____ Olga Kryliouk
5)	_____ (DATE)	_____ Anand Vasudev
6)	_____ (DATE)	_____ Jie Su
7)	_____ (DATE)	_____ David H. Quach
8)	_____ (DATE)	_____ Anzhong Chang
9)	_____ (DATE)	_____ Yuriy Melnik
10)	_____ (DATE)	_____ Harsukhdeep S. Ratia

11) _____ (DATE)

Son T. Nguyen

12) _____ (DATE)

Lily Pang

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Sandeep Nijhawan 1024 Seena Avenue Los Altos, California 94026	2)	Brian H. Burrows 1532 Bouchard Drive San Jose, California 95118
3)	Tetsuya Ishikawa 20072 Kilbride Drive Saratoga, California 95070	4)	Olga Kryliouk 315 E Washington Avenue Sunnyvale, California 94086
5)	Anand Vasudev 4 Elizabeth Street San Francisco, California 94110	6)	Jie Su 620 Park View Drive Santa Clara, California 95054
7)	David H. Quach 1205 Swinging Gate Court San Jose, California 95120	8)	Anzhong Chang 5847 Randleswood Court San Jose, California 95129
9)	Yuriy Melnik 3760 Tamarack Lane, Apt. 26 Santa Clara, California 95051	10)	Harsukhdeep S. Ratia 3354 Marchese Court Santa Clara, California 95051
11)	Son T. Nguyen 3032 Dow Drive San Jose, California 95136	12)	Lily Pang 35694 Cabrillo Drive Fremont, California 94536

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

CLUSTER TOOL FOR LEDS

for which application for Letters Patent in the United States was filed on March 31, 2010, under Serial No. 12/751,692, 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 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)	_____ (DATE)	_____
		Sandeep Nihawan
2)	<u>4/16/10</u> (DATE)	_____
		Brian H. Burrows
3)	_____ (DATE)	_____
		Tetsuya Ishikawa
4)	_____ (DATE)	_____
		Olga Kryliouk
5)	_____ (DATE)	_____
		Anand Vasudev
6)	_____ (DATE)	_____
		Jie Su
7)	_____ (DATE)	_____
		David H. Quach
8)	_____ (DATE)	_____
		Anzhong Chang
9)	_____ (DATE)	_____
		Yuriy Melnik
10)	_____ (DATE)	_____
		Harsukhdeep S. Ratia

11) _____ (DATE)

Son T. Nguyen

12) _____ (DATE)

Lily Pang

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Sandeep Nijhawan 1024 Seena Avenue Los Altos, California 94026	2)	Brian H. Burrows 1532 Bouchard Drive San Jose, California 95118
3)	Tetsuya Ishikawa 20072 Kilbride Drive Saratoga, California 95070	4)	Olga Kryliouk 315 E Washington Avenue Sunnyvale, California 94086
5)	Anand Vasudev 4 Elizabeth Street San Francisco, California 94110	6)	Jie Su 620 Park View Drive Santa Clara, California 95054
7)	David H. Quach 1205 Swinging Gate Court San Jose, California 95120	8)	Anzhong Chang 5847 Randleswood Court San Jose, California 95129
9)	Yuriy Melnik 3760 Tamarack Lane, Apt. 26 Santa Clara, California 95051	10)	Harsukhdeep S. Ratia 3354 Marchese Court Santa Clara, California 95051
11)	Son T. Nguyen 3032 Dow Drive San Jose, California 95136	12)	Lily Pang 35694 Cabrillo Drive Fremont, California 94536

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

CLUSTER TOOL FOR LEDS

for which application for Letters Patent in the United States was filed on March 31, 2010, under Serial No. 12/751,692, 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 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)	_____ (DATE)	_____	Sandeep Nijhawan
2)	_____ (DATE)	_____	Brian H. Burrows
3)	<u>4/19/10</u> (DATE)	<u>Tetsuya Ishikawa</u>	Tetsuya Ishikawa
4)	<u>4/13/10</u> (DATE)	<u>Olga Kryliouk</u>	Olga Kryliouk
5)	_____ (DATE)	_____	Anand Vasudev
6)	_____ (DATE)	<u>Jie Su</u>	Jie Su
7)	<u>4/13/10</u> (DATE)	<u>David M. Quach</u>	David M. Quach
8)	<u>4/13/2010</u> (DATE)	<u>Anzhong Chang</u>	Anzhong Chang
9)	_____ (DATE)	_____	Yuriy Melnik
10)	<u>4/14/2010</u> (DATE)	<u>Harsukhdeep S. Ratia</u>	Harsukhdeep S. Ratia

11) 4/13/10 (DATE)



Son T. Nguyen

12) 4/13/10 (DATE)



Lily Pang

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Sandeep Nijhawan 1024 Seena Avenue Los Altos, California 94026	2)	Brian H. Burrows 1532 Bouchard Drive San Jose, California 95118
3)	Tetsuya Ishikawa 20072 Kilbride Drive Saratoga, California 95070	4)	Olga Kryliouk 315 E Washington Avenue Sunnyvale, California 94086
5)	Anand Vasudev 4 Elizabeth Street San Francisco, California 94110	6)	Jie Su 620 Park View Drive Santa Clara, California 95054
7)	David H. Quach 1205 Swinging Gate Court San Jose, California 95120	8)	Anzhong Chang 5847 Randleswood Court San Jose, California 95129
9)	Yuriy Melnik 3760 Tamarack Lane, Apt. 26 Santa Clara, California 95051	10)	Harsukhdeep S. Ratia 3354 Marchese Court Santa Clara, California 95051
11)	Son T. Nguyen 3032 Dow Drive San Jose, California 95136	12)	Lily Pang 35694 Cabrillo Drive Fremont, California 94536

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

CLUSTER TOOL FOR LEDS

for which application for Letters Patent in the United States was filed on March 31, 2010, under Serial No. 12/751,692, 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 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)	_____ (DATE)	_____
		Sandeep Nijhawan
2)	_____ (DATE)	_____
		Brian H. Burrows
3)	_____ (DATE)	_____
		Tetsuya Ishikawa
4)	_____ (DATE)	_____
		Olga Kryliouk
5)	<u>4/14/10</u> (DATE)	_____
		Anand Vasudev
6)	<u>04-13-10</u> (DATE)	_____
		Jie Su
7)	<u>4-13-10</u> (DATE)	_____
		David M. Quach
8)	_____ (DATE)	_____
		Anzhong Chang
9)	<u>04.13.10</u> (DATE)	_____
		Yuriy Melnik
10)	_____ (DATE)	_____
		Harsukhdeep S. Ratia

11) _____ (DATE)

Son T. Nguyen

12) _____ (DATE)

Lily Pang