### 502673640 02/10/2014

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2720247

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
HIROSHI KATSUNO	01/24/2014
SHINJI SAITO	01/17/2014
REI HASHIMOTO	01/17/2014
JONGIL HWANG	01/24/2014
SHINYA NUNOUE	01/23/2014

### **RECEIVING PARTY DATA**

Name:	KABUSHIKI KAISHA TOSHIBA
Street Address:	1-1, SHIBAURA 1-CHOME, MINATO-KU
City:	ТОКУО
State/Country:	JAPAN

### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14176431

### **CORRESPONDENCE DATA**

 Fax Number:
 (703)413-2220

 Phone:
 (703) 413-3000

 Email:
 ehasan@oblon.com

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

Correspondent Name: OBLON, SPIVAK, ET AL.

Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	429755US20RD
NAME OF SUBMITTER:	EMEL HASAN
Signature:	/Emel Hasan/
	PATENT

502673640 REEL: 032183 FRAME: 0784

Date:	02/10/2014
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 5 source=429755USASN#page1.tif source=429755USASN#page2.tif source=429755USASN#page3.tif source=429755USASN#page4.tif source=429755USASN#page5.tif	

PATENT REEL: 032183 FRAME: 0785

Title of Invention	SEMICONDUCTOR LIGHT EMITTING DEVICE
As the below name	d inventor, I hereby declare that:
This declaration 🗵	The attached application, or
	United States application or PCT international application number filed on
The above-identifie	ed application was made or authorized to be made by me.
I believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.
(hereinafter referre	d to as "ASSIONEE") having places of business at: 1-1. Shibaura 1-chome, Minsto-ku, Tokyo, of acquiring the entire right, title and interest in and to said invention and in and to any Letters granted therefore in the United States and its territorial possessions and in any and all foreign
acknowledged, and said ASSIGNEE, the and in all foreign cother relevant Inter- interest in and to a	FORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby for other good and valuable consideration, I, by these presents do sell, assign and transfer unto he full and exclusive right to the said invention in the United States and its territorial possessions countries (including the right to claim priority under the terms of the International Convention and national Treatles and Arrangements from the aforesaid application) and the entire right, title and may and all Letters Patent which may be granted therefor in the United States and its territorial any and all foreign countries and in and to any and all divisions, reissues, continuations, newals thereof.
any and all foreign assignee of my enti- (his) successors an	ze and request the Patent Office Officials in the United States and its territorial possessions and a countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the ire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its d assigns, to the full end of the term for which said Letters Patent may be granted, as fully and would have been held by me had this Assignment and sale not been made.
respecting said in continuation, substi- all of said Letters possible to aid said	that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me vention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, itute, renewal and reissue applications, execute all necessary assignment papers to cause any and Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything it ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said ited States and its territorial possessions and in any and all foreign countries.
I hereby acknow by fine or imprison	dedge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 ment of not more than five (5) years, or both.
LEGAL NAME OF	1
Inventor: Hiroshi	KATSUNO Date: Jan, 24, 2014
Signature:	Croshi Hadrano
	The second secon

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

1048002297

Title of SEMICONDUCTOR LIGHT EMITTING DEVICE Invention
As the below named inventor, I hereby declare that:
This declaration 🖾 The attached application, or
is directed to: United States application or PCT international application number filed on
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application,
WHERBAS, Kabushiki Kaisha Toshiba
(hereinafter referred to as "ASSIGNBE") having places of business at: 1-1. Shibaura 1-chome. Minato-ku. Tokyo, Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;
NOW, THEREPORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.
Further, I agree that I will communicate to said ASSIGNEB or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.
LEGAL NAME OF INVENTOR
Inventor: Shinji SAITO Date: Jun. 17 2014
Signature: Juni Salitor

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

PATENT REEL: 032183 FRAME: 0787

Title of SEMICONDUCTOR LIGHT EMITTING DEVICE
Invention
As the below named inventor, I hereby declare that:
This deciaration 🗵 The attached application, or
is directed to: United States application or PCT international application number filed on
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
WHEREAS, Kabushiki Kaisha Toshiba (hereinafter referred to as "ASSIGNEE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo.  [Japan], is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries:
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to ald said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.
LEGAL NAME OF INVENTOR
Inventor: Rei HASHIMOTO: Dete: January 17. 201/2
Signature: Res Narlingto

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

1048000415

Title of SEMICONDUCTOR LIGHT EMITTING DEVICE Invention
As the below named inventor, I hereby declare that:
This declaration  The attached application, or
is directed to: United States application or PCT international application number
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
WHERRAS, Kabushiki Kaisha Toshiba (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, (hereinafter referred to as "ASSIGNBE") having places at: 1-1, Shibaura 1-chome, Minato-ku, Minato-ku, Minato-ku, Minato-ku, Minato-ku, Minato-ku, Mi
NOW, THERHFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNER, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEB as the any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEB, its assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEB, its assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEB, its assignment and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and this assignment and sale not been made.
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to the respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said because in the United States and its territorial possessions and in any and all foreign countries.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.
LEGAL NAME OF INVENTOR
Inventor: Jongil HWANG Date: Jan. 24, 2014
Signature: Jan & Margary

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

PATENT REEL: 032183 FRAME: 0789

Title of SEMICONDUCTOR LIGHT EMITTING DEVICE
Invention
As the below named inventor, I hereby declare that:
This declaration 🗵 The attached application, or
is directed to: United States application or PCT international application number filed on
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
WHEREAS, Kabushiki Kaisha Toshiba (hereinafter referred to as "ASSIGNEE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, <u>Iapan</u> , is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters  Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.
LEGAL NAME OF INVENTOR
Inventor: Shinya NUNOUE Date: Jan 23, 20/4
Signaturet

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P. ATTORNEYS AT LAW 1940 DUKE STREET

ALEXANDRIA, VIRGINIA 22314

10400032997

**RECORDED: 02/10/2014** 

**PATENT** 

**REEL: 032183 FRAME: 0790**