08/13/2015 503435779

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KOUHEI KINUGAWA	08/06/2015
HIDEHIRO TANIGUCHI	08/07/2015
MASAFUMI TAJIMA	07/30/2015

RECEIVING PARTY DATA

Name:	FURUKAWA ELECTRIC CO., LTD.
Street Address:	2-3, MARUNOUCHI 2-CHOME, CHIYODA-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	100-8322

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14825660

CORRESPONDENCE DATA

Fax Number: (703)413-2220

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.

Phone: (703) 413-3000 Email: celkins@oblon.com **Correspondent Name:** OBLON, ET AL. Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	458271US8CONT
NAME OF SUBMITTER:	CRYSTAL ELKINS
SIGNATURE:	/Crystal Elkins/
DATE SIGNED:	08/13/2015
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 3

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> **PATENT** REEL: 036321 FRAME: 0589 503435779

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SECET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of	SEMICONDUCTOR OPTICAL ELEMENT, SEMICONDUCTOR LASER
<u>Invention</u>	ELEMENT, AND METHOD FOR MANUFACTURING SEMICONDUCTOR
	OPTICAL ELEMENT AND SEMICONDUCTOR LASER ELEMENT, AND
	METHOD FOR MANUFACTURING SEMICONDUCTOR LASER MODULE
A - 4b - It -l - 1 - 1 - 1	AND SEMICONDUCTOR ELEMENT
	d inventor, I hereby declare that:
This declaration 🔀	The attached application, or
is directed to:	United States application or PCT international application number
The above-identifie	d application was made or authorized to be made by me.
I believe that I am th	he original inventor or an original joint inventor of a claimed invention in the application.
WHEREAS, FUR	UKAWA ELECTRIC CO., LTD.
Tokyo 100-8322 Jaj	to as "ASSIGNEE") having places of business at: 2-3. Marunouchi 2-chome, Chiyoda-ku, pan, is desirous of acquiring the entire right, title and interest in and to said invention and in and at that may be granted therefore in the United States and its territorial possessions and in any and it
acknowledged, and said ASSIGNEE, th and in all foreign co other relevant Inter- interest in and to an	ORE, 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 e full and exclusive right to the said invention in the United States and its territorial possessions puntries (including the right to claim priority under the terms of the International Convention and national Treaties 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 entir (his) successors and	te and request the Patent Office Officials in the United States and its territorial possessions and countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the re right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its 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.
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.	
oy nae or imprisonm	edge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 tent of not more than five (5) years, or both.
LEGAL NAME OF	INVENTOR
Inventor: Kouhei K	CINUGAWA Date: August 6, 2015
Signature:	Kouhei Kinugawa

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

PATENT REEL: 036321 FRAME: 0590

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of	SEMICONDUCTOR OPTICAL ELEMENT, SEMICONDUCTOR LASER
Invention	ELEMENT, AND METHOD FOR MANUFACTURING SEMICONDUCTOR
	OPTICAL ELEMENT AND SEMICONDUCTOR LASER ELEMENT, AND
	METHOD FOR MANUFACTURING SEMICONDUCTOR LASER MODULE AND SEMICONDUCTOR ELEMENT
As the below named	d 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-identifie	d application was made or authorized to be made by me.
	he original inventor or an original joint inventor of a claimed invention in the application.
(hereinafter referred Tokyo 100-8322 Jan	RUKAWA ELECTRIC CO., LTD. d to as "ASSIGNEE") having places of business at: 2-3, Marunouchi 2-chome. Chiyoda-ku, pan, is desirous of acquiring the entire right, title and interest in and to said invention and in and at that may be granted therefore in the United States and its territorial possessions and in any and it.
acknowledged, and said ASSIGNEE, th and in all foreign co- other relevant Inter- interest in and to ar possessions and in substitutions and rer	
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.	
by fine or imprisonm	ledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 nent of not more than five (5) years, or both.
LEGAL NAME OF	INVENTOR
Inventor: Hidehiro	TANIGUCHI Date: August 7, 2015
Signature: <u>)dide</u>	Sino Taniguchi

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
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PATENT REEL: 036321 FRAME: 0591

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of	SEMICONDUCTOR OPTICAL ELEMENT, SEMICONDUCTOR LASER
Invention	ELEMENT, AND METHOD FOR MANUFACTURING SEMICONDUCTOR
	OPTICAL ELEMENT AND SEMICONDUCTOR LASER ELEMENT, AND
	METHOD FOR MANUFACTURING SEMICONDUCTOR LASER MODULE AND SEMICONDUCTOR ELEMENT
As the helmy name	d inventor, I hereby declare that:
	The attached application, or
	United States application or PCT international application number
The above-identifie	d application was made or authorized to be made by me.
I believe that I am t	he original inventor or an original joint inventor of a claimed invention in the application.
(hereinafter referred Tokyo 100-8322 Jan	AUKAWA ELECTRIC CO., LTD. If to as "ASSIGNEE") having places of business at: 2-3, Marmouchi 2-chome, Chiyoda-ku, pan, is desirous of acquiring the entire right, title and interest in and to said invention and in and at that may be granted therefore in the United States and its territorial possessions and in any and its
acknowledged, and said ASSIGNEE, th and in all foreign of other relevant Inter- interest in and to as	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 be 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 Treaties and Arrangements from the aforesaid application) and the entire right, title and my 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 and	re and request the Patent Office Officials in the United States and its territorial possessions and countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the re right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its lassigns, 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.
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 acknowl by fine or imprisonn	edge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 nent of not more than five (5) years, or both.
LEGAL NAME OF	INVENTOR
Inventor: Masafun	ni TAJIMA Date: July 30th, 2015
	salumi Zajima

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PATENT REEL: 036321 FRAME: 0592

RECORDED: 08/13/2015