PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3909347

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HIDEAKI HASEGAWA	04/20/2016
NORIYUKI YOKOUCHI	04/22/2016
TAKETSUGU SAWAMURA	04/21/2016
SATOSHI IRINO	04/26/2016
JUNJI YOSHIDA	04/26/2016

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:	15177175

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: bcarrillo@oblon.com
Correspondent Name: OBLON, ET AL.
Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	472419US8CONT
NAME OF SUBMITTER:	BRYANT CARRILLO
SIGNATURE:	/Bryant Carrillo/
DATE SIGNED:	06/08/2016
	This document serves as an Oath/Declaration (37 CFR 1.63).
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Total Attachments: 5

PATENT REEL: 038848 FRAME: 0526

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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	METHOD OF DESIGNING SEMICONDUCTOR LASER DEVICE, METHOD	
Invention	OF DESIGNING RAMAN AMPLIFIER, METHODS OF MANUFACTURING	
	SEMICONDUCTOR LASER DEVICE, SEMICONDUCTOR LASER DEVICE,	
	RAMAN AMPLIFIER, AND OPTICAL COMMUNICATION SYSTEM	
As the below name	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	ed 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.	
WHEREAS, FUE	RUKAWA ELECTRIC CO., LTD.	
(hereinafter referred to as "ASSIGNEE") having places of business at: 2-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8322 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 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: Hideaki	HASEGAWA, Date: April 20,2016	
Signature:	Hideaki Hasegana	
Signature:	// www r Hwsv/	

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

ALEXANDRIA, VIRGINIA 22314

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Invention	OF DESIGNING RAMAN AMPLIFIER, METHODS OF MANUFACTURING
	SEMICONDUCTOR LASER DEVICE, SEMICONDUCTOR LASER DEVICE, RAMAN AMPLIFIER, AND OPTICAL COMMUNICATION SYSTEM
As the below name	d inventor, I hereby declare that:
	The attached application, or
	United States application or PCT international application number
	filed on
The above-identifie	d application was made or authorized to be made by me.
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	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 A A A
Inventor: Noriyuk	INVENTOR i YOKOUCHI) Date: April 22, 2016
Signature:	M. Maline

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW

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

Invention	OF DESIGNING SEMICONDUCTOR LASER DEVICE, METHOD OF DESIGNING RAMAN AMPLIFIER, METHODS OF MANUFACTURING SEMICONDUCTOR LASER DEVICE, SEMICONDUCTOR LASER DEVICE,	
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	ed inventor, I hereby declare that:	
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is directed to: [United States application or PCT international application number	
The above-identif	ied application was made or authorized to be made by me.	
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LEGAL NAME C)F INVENTOR	
Inventor: Takets	sugu SAWAMURA Date: 21, April, 2016	
Signature:	Taketaran Sanamum Date: 21, April, 2016	

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
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ALEXANDRIA, VIRGINIA 22314

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As the below name	d inventor, I hereby declare that:	
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LEGAL NAME OF INVENTOR		
Inventor: Satoshi		
Signature	Toshi charing	

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

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by fine or imprisonn	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: Junji YC	
Signature:	Jungo Yarlida

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

> PATENT REEL: 038848 FRAME: 0532

RECORDED: 06/08/2016