PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6593984

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MASAKAZU TAKABAYASHI	01/20/2021
KENICHI ABE	01/19/2021
SATOSHI NISHIKAWA	01/18/2021
KOICHI AKIYAMA	01/18/2021

RECEIVING PARTY DATA

Name:	MITSUBISHI ELECTRIC CORPORATION
Street Address:	7-3, MARUNOUCHI 2-CHOME,
Internal Address:	CHIYODA-KU,
City:	TOKYO
State/Country:	JAPAN
Postal Code:	100-8310

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17274468

CORRESPONDENCE DATA

Fax Number:

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: 5713766333

Email: anaquadocketing@Xsensus.com

Correspondent Name: XSENSUS LLP

Address Line 1: 200 DAINGERFIELD ROAD

Address Line 2: SUITE 201

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	15780US01
NAME OF SUBMITTER:	SHELLY LEDERLE
SIGNATURE:	/Shelly Lederle/
DATE SIGNED:	03/10/2021
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT REEL: 055551 FRAME: 0700

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Total Attachments: 4

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Title of Invention	Multi-Mode Interferometric Optical Waveguide Device and Photonic Integrated Circuit
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 PCT/JP2018/037685 filed on October 10, 2018
The above-identified	application was made or authorized to be made by me.
I believe that I am th	e original inventor or an original joint inventor of a claimed invention in the application.
	pishi Electric Corporation
desirous of acquiring	to as "ASSIGNEE") having places of business at: T.3. Marunoutel 3 choice. Chipoda-Ru, TOKYO 100-8310 JAPAN, is the entire right, title and interest in and to said invention and in and to any Letters Patent that after in the United States and its territorial possessions and in any and all foreign countries;
I, by these presents d in the United States under the terms of th aforesaid application therefor in the United	ORE, for good, valuable, and adequate consideration, the receipt of which is hereby acknowledged, to sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention and its territorial possessions and in all foreign countries (including the right to claim priority to International Convention and other relevant International Treaties and Arrangements from the and the entire right, title and interest in and to any and all Letters Patent which may be granted d States and its territorial possessions and in any and all foreign countries and in and to any and a continuations, substitutions and renewals thereof.
and all foreign count of my entire right, tit and assigns, to the fu	and request the Patent Office Officials in the United States and its territorial possessions and any ries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee le and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors ll end of the term for which said Letters Patent may be granted, as fully and entirely as the same d by me had this Assignment and sale not been made.
said invention, and substitute, renewal an Patent to be issued t ASSIGNEE, its succe	at I will communicate to said ASSIGNEE or its representatives any facts known to me respecting testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, and reissue applications, execute all necessary assignment papers to cause any and all of said Letters to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said essors and assigns, to obtain and enforce proper protection for said invention in the United States sessions and in any and all foreign countries.
I hereby acknowle by fine or imprisonme	edge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 ent of not more than five (5) years, or both.
LEGAL NAME OF I	NVENTOR
Inventor: Masakazu T	AKABAYASHI Date: Jahuary 20, 202
Signature: <u>Masak</u> s	uzu Takabayashi

XSENSUS LLP ATTORNEYS AT LAW 200 DAINGERFIELD ROAD, SUITE 201 Alexandria, VA 22314

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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.
	ubishi Electric Corporation
desirous of acquirir	It to as "ASSIGNEE") having places of business at: 7-3, Marintuchi 2-chome, Chiyoda-ku, 10XYO 10D-E310 JAFAN, is the entire right, title and interest in and to said invention and in and to any Letters Patent that refore in the United States and its territorial possessions and in any and all foreign countries;
I, by these presents in the United States under the terms of t aforesaid applicatio therefor in the Unite	ORE, for good, valuable, and adequate consideration, the receipt of which is hereby acknowledged, do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention and its territorial possessions and in all foreign countries (including the right to claim priority the International Convention and other relevant International Treaties and Arrangements from the n) and the entire right, title and interest in and to any and all Letters Patent which may be granted and States and its territorial possessions and in any and all foreign countries and in and to any and assections, substitutions and renewals thereof.
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said invention, and substitute, renewal a Patent to be issued ASSIGNEE, its succ	nat I will communicate to said ASSIGNEE or its representatives any facts known to me respecting testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, nd reissue applications, execute all necessary assignment papers to cause any and all of said Letters to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said cessors and assigns, to obtain and enforce proper protection for said invention in the United States issessions and in any and all foreign countries.
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LEGAL NAME OF	INVENTOR
Inventor: Kenichi A8	
Signature: Kend	di arbe

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I believe that I am t	he original inventor or an original joint inventor of a claimed invention in the application.
WHEREAS, Mitse	ubishi Electric Corporation
desirous of acquirir	d to as "ASSIGNEE") having places of business at: (A. MANGARIAN CONTROLLED HONOR HON
I, by these presents in the United States under the terms of t aforesaid applicatio therefor in the Unite	ORE, for good, valuable, and adequate consideration, the receipt of which is hereby acknowledged, do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention is and its territorial possessions and in all foreign countries (including the right to claim priority the International Convention and other relevant International Treaties and Arrangements from the n) and the entire right, title and interest in and to any and all Letters Patent which may be granted and States and its territorial possessions and in any and all foreign countries and in and to any and as, continuations, substitutions and renewals thereof.
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LEGAL NAME OF	INVENTOR
Inventor: Satoshi Ni	SHIKAWA Date: January 18, 2021
Signature: Sato	

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desirous of acquirin	to as "ASSIGNEE") having places of business at: (2.3. Marchiness, Chipothalu, TOKYO 102-8310 JUPAN) is g the entire right, title and interest in and to said invention and in and to any Letters Patent that efore in the United States and its territorial possessions and in any and all foreign countries;
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LEGAL NAME OF	INVENTOR
Inventor: Koichi AKIY	AMA Date: Johnhary 18 202
Signature: Laichi	

XSENSUS LLP ATTORNEYS AT LAW 200 DAINGERFIELD ROAD, SUITE 201 Alexandria, VA 22314

> PATENT REEL: 055551 FRAME: 0705

RECORDED: 03/10/2021