PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4841065

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHINTAROU HISATAKE	12/19/2017
TADAO NAGATSUMA	12/27/2017
HIROHISA UCHIDA	12/18/2017

RECEIVING PARTY DATA

Name:	OSAKA UNIVERSITY
Street Address:	1-1, YAMADAOKA, SUITA-SHI
City:	OSAKA
State/Country:	JAPAN
Postal Code:	565-0871

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15740225

CORRESPONDENCE DATA

Fax Number: (202)739-3001

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: 202.739.3000

Email: patents@morganlewis.com, anne.sayles@morganlewis.com

Correspondent Name: **GREGORY T. LOWEN**

Address Line 1: 1111 PENNSYLVANIA AVE NW Address Line 4: WASHINGTON, D.C. 20004

ATTORNEY DOCKET NUMBER:	120709-5001
NAME OF SUBMITTER:	GREGORY T. LOWEN
SIGNATURE:	/Gregory T. Lowen/
DATE SIGNED:	02/26/2018

Total Attachments: 3

source=120709-5001-Assignment#page1.tif source=120709-5001-Assignment#page2.tif source=120709-5001-Assignment#page3.tif

> **PATENT** REEL: 045043 FRAME: 0767 504794333

ASSIGNMENT

WHEREAS WE, the below named inventors, (hereinafter referred to as "Assignors"), have made an invention entitled:

ELECTRO-OPTIC PROBE, ELECTROMAGNETIC WAVE MEASURING APPARATUS, AND ELECTROMAGNETIC WAVE MEASURING METHOD

for which WE filed a national stage application of PCT/JP2016/069076 for Letters Patent; and

WHEREAS **Osaka University** whose post office address is 1-1, Yamadaoka, Suita-shi, Osaka 565-0871 Japan (hereinafter referred to as "Assignee"), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the applications of patent on this invention and the Letters Patent to be issued upon these applications;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from Assignee has hereby acknowledged, WE, as assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, OUR entire right, title, and interest in and to this invention and all United States applications, and all divisions, and continuations thereof, and all United States Letters Patents which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and divisionals and reissues thereof; and WE hereby authorize and request the Director of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent of this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that WE have the full right to convey the interest assigned by this Assignment, and WE have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that WE will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to US respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

IN TESTIMONY WHEREOF, WE have hereunto set my hands.

Full Name of Assignor	Shintarou HISATAKE
Address	c/o Osaka University, 1-1, Yamadaoka, Suita-shi, Osaka 565-0871 Japan
Signature	Shintaro Hisatake
Date	Dec., 19, 2017

Morgan, Lewis & Bockius LLP

ASSIGNMENT

WHEREAS WE, the below named inventors, (hereinafter referred to as "Assignors"), have made an invention entitled:

ELECTRO-OPTIC PROBE, ELECTROMAGNETIC WAVE MEASURING APPARATUS, AND ELECTROMAGNETIC WAVE MEASURING METHOD

for which WE filed a national stage application of PCT/JP2016/069076 for Letters Patent; and

WHEREAS Osaka University whose post office address is 1-1, Yamadaoka, Suita-shi, Osaka 565-0871 Japan (hereinafter referred to as "Assignee"), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the applications of patent on this invention and the Letters Patent to be issued upon these applications;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from Assignee has hereby acknowledged, WE, as assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, OUR entire right, title, and interest in and to this invention and all United States applications, and all divisions, and continuations thereof, and all United States Letters Patents which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and divisionals and reissues thereof; and WE hereby authorize and request the Director of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent of this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that WE have the full right to convey the interest assigned by this Assignment, and WE have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that WE will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to US respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

IN TESTIMONY WHEREOF, WE have hereunto set my hands.

Full Name of Assignor	Tadao NAGATSUMA
Address	c/o Osaka University, 1-1, Yamadaoka, Suita-shi, Osaka 565-0871 Japan
Signature	Tadwagaleer
Date	December 27, 2017

Morgan, Lewis & Bockius LLP

ASSIGNMENT

WHEREAS WE, the below named inventors, (hereinafter referred to as "Assignors"), have made an invention entitled:

ELECTRO-OPTIC PROBE, ELECTROMAGNETIC WAVE MEASURING APPARATUS, AND ELECTROMAGNETIC WAVE MEASURING METHOD

for which WE filed a national stage application of PCT/JP2016/069076 for Letters Patent; and

WHEREAS Osaka University whose post office address is 1-1, Yamadaoka, Suita-shi, Osaka 565-0871 Japan (hereinafter referred to as "Assignee"), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the applications of patent on this invention and the Letters Patent to be issued upon these applications;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from Assignee has hereby acknowledged, WE, as assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, OUR entire right, title, and interest in and to this invention and all United States applications, and all divisions, and continuations thereof, and all United States Letters Patents which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and divisionals and reissues thereof; and WE hereby authorize and request the Director of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent of this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that WE have the full right to convey the interest assigned by this Assignment, and WE have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that WE will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to US respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

IN TESTIMONY WHEREOF, WE have hereunto set my hands,

Full Name of Assignor	Hirohisa UCHIDA
Address	c/o ARKRAY, Inc., Yousulen-nai, 59, Gansuln-cho, Kamigyo-ku, Kyoto-shi, Kyoto 602- 0008 Japan
Signature	内田永台久
Date	Pecenter 18 /2017

Morgan, Lewis & Bockius LLP

PATENT REEL: 045043 FRAME: 0770

RECORDED: 02/26/2018