#### 11/15/2017 504642713

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4689434

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ISAO TAKASU	10/13/2017
ATSUSHI WADA	10/16/2017
SATOMI TAGUCHI	10/13/2017
MITSUYOSHI KOBAYASHI	10/17/2017

#### **RECEIVING PARTY DATA**

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

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15685522

#### 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.

(703) 413-3000 Phone:

Email: mvukovic@oblon.com

**Correspondent Name:** OBLON, ET AL. Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	506858US
NAME OF SUBMITTER:	MARA VUKOVIC
SIGNATURE:	/Mara Vukovic/
DATE SIGNED:	11/15/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

#### **Total Attachments: 4**

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Title of Invention	RADIATION DETECTOR
As the below named	l inventor, I hereby declare that:
This declaration	The attached application, or
is directed to:	United States application or PCT international application number 15/685,522 filed on August 24, 2017 .
The above-identified	d application was made or authorized to be made by me.
I believe that I am th	ne original inventor or an original joint inventor of a claimed invention in the application.
(hereinafter referred	ushiki Kaisha Toshiba I to as "ASSIGNEE") having places of business at: 1-1. Shibaura 1-chome, Minato-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 co other relevant Internal interest in and to ar	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 untries (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 assignce of my entis (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 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.
respecting said inv continuation, substituall of said Letters I possible to aid said	that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me cention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, tute, 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 ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said ted States and its territorial possessions and in any and all foreign countries.
	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: Isao TA	1KASU Date: Oct. 13, 2017
Signature 200	ro Telegen

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

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(hereinafter referred Japan , is desirous	sushiki Kaisha Toshiba d to as "ASSIGNEE") having places of business at: <u>I-1. Shibaura 1-chome. Minato-ku. Tokyo.</u> 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 conter 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 ne full and exclusive right to the said invention in the United States and its territorial possessions ountries (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.
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respecting said inv 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 I 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.
	rledge 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	
Inventor: Atsush	i WADA Date: October 16, 2017
Signature: Q	esushi Wada

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
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Invention	RADIATION DETECTOR
As the below name	d inventor, I hereby declare that:
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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.
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acknowledged, and said ASSIGNEE, it and in all foreign co other 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 ne full and exclusive right to the said invention in the United States and its territorial possessions ountries (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	ze 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 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.
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	ledge 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	INVENTOR
Inventor: Satomi	TAGUCHI Date: Oct (3,201)
Cian airea	inter 1 Tag al!

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

Title of RADIATION DETECTOR Invention
As the below named inventor, I hereby declare that:
This declaration [ ] The attached application, or
is directed to:
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: I-1, Shibaura 1-chome, Minato-ku, Tokyo, Janan, 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: Mitsuyoshi KOBAYASHI Date: Oct. 17, 2617
Signature: Mizagothi toboyothi

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

PATENT REEL: 044127 FRAME: 0490

**RECORDED: 11/15/2017**