### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

ersion v1.1 EPAS ID: PAT2824057

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
MICHIHIRO KAWAGUCHI	04/14/2014
KIMINOBU AKENO	04/16/2014
YOSHINORI KAGAWA	04/14/2014
YU ASAMI	04/16/2014
KEISUKE YAMAGUCHI	04/17/2014

### RECEIVING PARTY DATA

Name:	NUFLARE TECHNOLOGY, INC.
Street Address:	8-1, SHINSUGITA-CHO, ISOGO-KU
City:	YOKOHAMA-SHI, KANAGAWA
State/Country:	JAPAN

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

Property Type	Number
Application Number:	14258371

### **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 via

US Mail.

**Phone:** (703) 413-3000

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

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	434043US20	
NAME OF SUBMITTER:	ALVA WORDEN	
SIGNATURE:	/Alva Worden/	
<b>DATE SIGNED:</b> 04/22/2014		
	This document serves as an Oath/Declaration (37 CFR 1.63).	

### **Total Attachments: 5**

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502777461 PATENT REEL: 032728 FRAME: 0664

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> PATENT REEL: 032728 FRAME: 0665

Invention	PARTICLE BEAM DRAWING METHOD	
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 filed on	
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.	
(hereinafter referreshi, Kanagawa, Jap	Flare Technology, Inc.  d to as "ASSIGNEE") having places of business at: 8-1, Shinsugita-cho, Isogo-ku, Yokohama- an, 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 s;	
acknowledged, and said ASSIGNEE, the and in all foreign of 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 me 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 mational 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 enti (his) successors and	ze and request the Patent Office Officials in the United States and its territorial possessions and a countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the ire 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 a 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 imprison	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: Mich;	hiro, kawaguchi Date: April. 14. 2014	
Signature: Michil	niro KAWAGUCHI	

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

PATENT REEL: 032728 FRAME: 0666

Title of Invention	PARTICLE BEAM DRAWING APPARATUS AND CHARGED PARTICLE BEAM DRAWING METHOD	
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	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	Plare Technology, Inc.  d to as "ASSIGNEE") having places of business at: 8-1, Shinsugita-cho, Isogo-ku, Yokohama- an, 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 s;	
acknowledged, and said ASSIGNEE, the 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 the 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 mational Treaties and Arrangements from the aforesaid application) and the entire right, title and any 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 a countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the ire 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 a 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 acknow by fine or imprison	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:	minohu Atrono Date: April 16, 2014	
Signature: Kimine	obu AKENO	

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

PATENT

**REEL: 032728 FRAME: 0667** 

Title of Invention	PARTICLE BEAM DRAWING APPARATUS AND CHARGED PARTICLE BEAM DRAWING METHOD	
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	the original inventor or an original joint inventor of a claimed invention in the application.	
(hereinafter referre	Flare Technology, Inc.  d to as "ASSIGNEE") having places of business at: 8-1, Shinsugita-cho, Isogo-ku, Yokohama- nan, is desirous of acquiring the entire right, title and interest in and to said invention and in and nt that may be granted therefore in the United States and its territorial possessions and in any and s;	
acknowledged, and said ASSIGNEE, the and in all foreign of other relevant Inter- interest in and to a	FORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby a for other good and valuable consideration, I, by these presents do sell, assign and transfer unto the 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 mational Treaties and Arrangements from the aforesaid application) and the entire right, title and any 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, mewals thereof.	
any and all foreign assignee of my ent (his) successors an	ize and request the Patent Office Officials in the United States and its territorial possessions and a countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the ire 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 a 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.		
	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: Yes	whom KAGAWA Date: April 14, 2014	
Signature: Yoshin		

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1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

PATENT REEL: 032728 FRAME: 0668

Title of Invention CHARGED PARTICLE BEAM DRAWING APPARATUS AND CHARGED PARTICLE BEAM DRAWING METHOD		
As the below named inventor, I hereby declare that:		
This declaration \( \sum \) The attached application, or		
is directed to: United States application or PCT international application number filed on		
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, NuFlare Technology, Inc. (hereinafter referred to as "ASSIGNEE") having places of business at: 8-1. Shinsugita-cho, Isogo-ku, Yokohama-shi, Kanagawa, 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: Yu ASAMI Date: April 16 2014		
Signature: Yu Asami		

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

PATENT .....

REEL: 032728 FRAME: 0669

Title of Invention	CHARGED PARTICLE BEAM DRA PARTICLE BEAM DRAWING MET	WING APPARATUS AND CHARGED HOD
As the below name	d inventor, I hereby declare that:	
This declaration 🗵	The attached application, or	
	United States application or PCT internation filed on	•
The above-identifie	ed application was made or authorized to be π	nade by me.
I believe that I am t	the original inventor or an original joint inven	tor of a claimed invention in the application.
WHEREAS, NuFlare Technology, Inc. (hereinafter referred to as "ASSIGNEE") having places of business at: 8-1, Shinsugita-cho, Isogo-ku, Yokohama-shi, Kanagawa, 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;		
acknowledged, and said ASSIGNEE, the and in all foreign conter relevant Inter- interest in and to a	I for other good and valuable consideration, I the full and exclusive right to the said invention to claim priority mational Treaties and Arrangements from the lany and all Letters Patent which may be gran any and all foreign countries and in and	DOLLARS (\$5.00), the receipt whereof is hereby I, by these presents do sell, assign and transfer unto on in the United States and its territorial possessions under the terms of the International Convention and a aforesaid application) and the entire right, title and inted therefor in the United States and its territorial I to any and all divisions, reissues, continuations,
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 acknow by fine or imprison	wledge that any willful false statement made in ament of not more than five (5) years, or both.	n this declaration is punishable under 18 U.S.C. 1001
LEGAL NAME OF		h
Inventor: Keisuko	e YAMAGUCHI	Date: April 17, 2014
Signature:	Keisuke Yamaguchi	

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

> **PATENT REEL: 032728 FRAME: 0670**

RECORDED: 04/22/2014