

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4379179

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
XING CHEN	03/25/2014
ILYA POKIDOV	03/25/2014
FENG TIAN	03/27/2014
KEN TRAN	03/25/2014
DAVID LAM	03/25/2014
KEVIN W. WENZEL	03/25/2014
RECEIVING PARTY DATA	
Name:	MKS INSTRUMENTS, INC.
Street Address:	2 TECH DRIVE
Internal Address:	SUITE 201
City:	ANDOVER
State/Country:	MASSACHUSETTS
Postal Code:	01810
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15484072
CORRESPONDENCE DATA	
Fax Number:	(617)526-9899
<i>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.</i>	
Phone:	617-526-9600
Email:	dgilbride@proskauer.com
Correspondent Name:	PROSKAUER ROSE LLP
Address Line 1:	ONE INTERNATIONAL PLACE
Address Line 4:	BOSTON, MASSACHUSETTS 02110
ATTORNEY DOCKET NUMBER:	ASX-173D1
NAME OF SUBMITTER:	JASON P. COLANGELO
SIGNATURE:	/Jason P. Colangelo/
DATE SIGNED:	04/21/2017

Total Attachments: 12

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTORS: Chen *et al.* CONFIRMATION NO.: 9954
APPLICATION NO.: 14/212,398 FILING DATE: March 14, 2014
TITLE: TOROIDAL PLASMA ABATEMENT APPARATUS AND METHOD

DECLARATION PURSUANT TO 37 C.F.R. § 1.63 AND ASSIGNMENT

I. DECLARATION

As the below named inventor, I hereby make the following declarations with respect the above-identified patent application attached hereto:

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 above-identified application;

I hereby state that I have reviewed and understand the contents of the above-identified application, including the claims;

I acknowledge the duty to disclose to the Patent Office all information known by me to be material to patentability as defined in 37 C.F.R. § 1.56, including for continuation-in-part applications, material information known by me which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application; and

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.

II. ASSIGNMENT

WHEREAS, I, Xing Chen, have invented, solely or jointly, one or more inventions described in the above-identified patent application for letters patent; and

WHEREAS, MKS Instruments, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 2 Tech Drive, Suite 201, Andover, MA 01810, desires to acquire an interest therein, in accordance with agreements duly entered into with me.

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such letters patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such letters patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and letters patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, 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. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of

industrial property by filing any such applications for letters patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all letters patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all letters patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein.


I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications.

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III. SIGNATURE BLOCK

IN TESTIMONY WHEREOF, I have hereunto set my hand-and affixed my seal on the date set forth below.

Inventor: 
Xing Chen

NOTARIZATION

State/Commonwealth of Massachusetts
County of Middlesex) ss

On this 25 day of March, 2014 before me, the undersigned notary public, personally appeared Xing Chen, proved to me through satisfactory evidence of identification, which were MA Univer License, to be the person whose name is signed on the preceding or attached document in my presence.

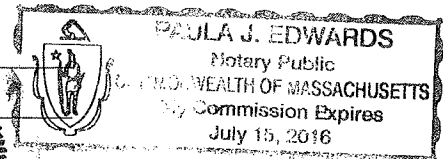
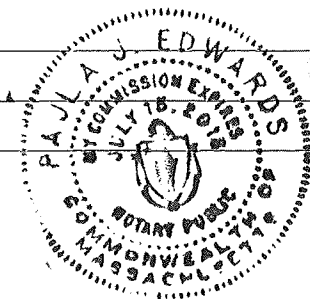

Notary Public
My Commission Expires: 7/15/16

WITNESS

Witness Signature: _____

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Witness Date: _____



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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.

II. ASSIGNMENT

WHEREAS, I, Ilya Pokidov, have invented, solely or jointly, one or more inventions described in the above-identified patent application for letters patent; and

WHEREAS, MKS Instruments, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 2 Tech Drive, Suite 201, Andover, MA 01810, desires to acquire an interest therein, in accordance with agreements duly entered into with me.

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such letters patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such letters patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and letters patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, 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. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of

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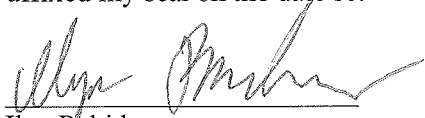
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I hereby authorize and request the Director of the United States Patent and Trademark Office to issue such letters patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

III. SIGNATURE BLOCK

IN TESTIMONY WHEREOF, I have hereunto set my hand-and affixed my seal on the date set forth below.

Inventor: 
Ilya Pokidov

NOTARIZATION

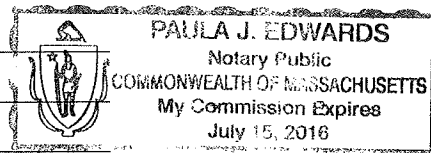
State/Commonwealth of Massachusetts
County of Middlesex) ss

On this 25 day of March, 2014 before me, the undersigned notary public, personally appeared Ilya Pokidov, proved to me through satisfactory evidence of identification, which were MA Drivers License, to be the person whose name is signed on the preceding or attached document in my presence.


Notary Public
My Commission Expires: 7/15/16

WITNESS

Witness Signature: _____
Witness Name: _____
Witness Date: _____



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTORS: Chen *et al.* CONFIRMATION NO.: 9954
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II. ASSIGNMENT

WHEREAS, I, Feng Tian, have invented, solely or jointly, one or more inventions described in the above-identified patent application for letters patent; and

WHEREAS, MKS Instruments, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 2 Tech Drive, Suite 201, Andover, MA 01810, desires to acquire an interest therein, in accordance with agreements duly entered into with me.

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such letters patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such letters patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and letters patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, 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. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of

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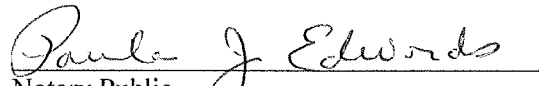
IN TESTIMONY WHEREOF, I have hereunto set my hand-and affixed my seal on the date set forth below.

Inventor: 
Feng Tian

NOTARIZATION

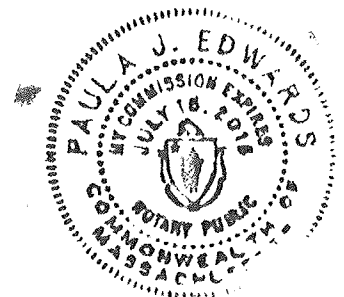
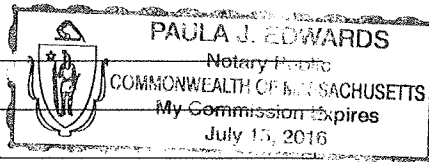
State/Commonwealth of *Massachusetts*
County of *Middlesex*) ss

On this *27* day of *March*, 2014 before me, the undersigned notary public, personally appeared Feng Tian, proved to me through satisfactory evidence of identification, which were *NH Driver's License*, to be the person whose name is signed on the preceding or attached document in my presence.


Notary Public
My Commission Expires: *7/15/16*

WITNESS

Witness Signature: _____
Witness Name: _____
Witness Date: _____



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTORS: Chen *et al.* CONFIRMATION NO.: 9954
APPLICATION NO.: 14/212,398 FILING DATE: March 14, 2014
TITLE: TOROIDAL PLASMA ABATEMENT APPARATUS AND METHOD

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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.

II. ASSIGNMENT

WHEREAS, I, Ken Tran, have invented, solely or jointly, one or more inventions described in the above-identified patent application for letters patent; and

WHEREAS, MKS Instruments, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 2 Tech Drive, Suite 201, Andover, MA 01810, desires to acquire an interest therein, in accordance with agreements duly entered into with me.

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such letters patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such letters patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and letters patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, 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. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of

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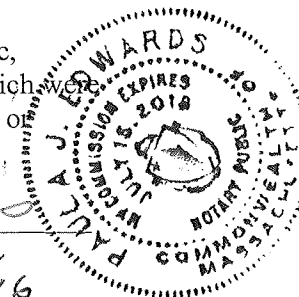
Inventor: *Ken Tran*
Ken Tran

NOTARIZATION

State/Commonwealth of Massachusetts
County of Middlesex) ss

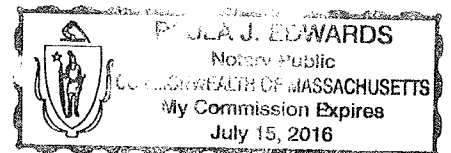
On this 25 day of March, 2014 before me, the undersigned notary public, personally appeared Ken Tran, proved to me through satisfactory evidence of identification, which were MA Drivers License to be the person whose name is signed on the preceding or attached document in my presence.

Paul J. Edwards
Notary Public
My Commission Expires: 7/15/16



WITNESS

Witness Signature: _____
Witness Name: _____
Witness Date: _____



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II. ASSIGNMENT

WHEREAS, I, David Lam, have invented, solely or jointly, one or more inventions described in the above-identified patent application for letters patent; and

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Inventor: *David Lam*
David Lam

NOTARIZATION

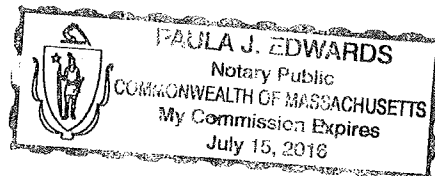
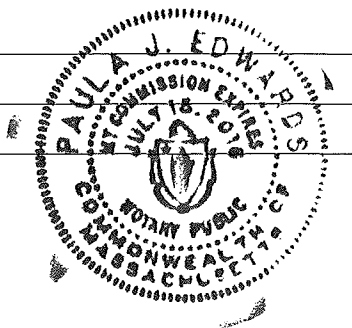
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I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

II. ASSIGNMENT

WHEREAS, I, Kevin W. Wenzel, have invented, solely or jointly, one or more inventions described in the above-identified patent application for letters patent; and

WHEREAS, MKS Instruments, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 2 Tech Drive, Suite 201, Andover, MA 01810, desires to acquire an interest therein, in accordance with agreements duly entered into with me.

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such letters patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such letters patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and letters patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, 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. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of

industrial property by filing any such applications for letters patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all letters patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all letters patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein.

I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications.

I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved.

I hereby authorize and request the Director of the United States Patent and Trademark Office to issue such letters patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

III. SIGNATURE BLOCK

IN TESTIMONY WHEREOF, I have hereunto set my hand-and affixed my seal on the date set forth below.

Inventor:

[Handwritten Signature]
Kevin W. Wenzel

NOTARIZATION

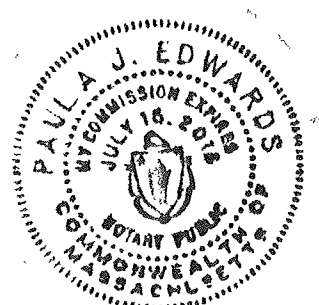
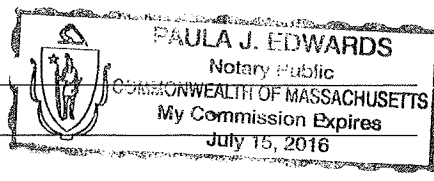
State/Commonwealth of *Massachusetts*
County of *Middlesex*) ss

On this *25* day of *March*, 2014 before me, the undersigned notary public, personally appeared Kevin W. Wenzel, proved to me through satisfactory evidence of identification, which were *MA Driver's License*, to be the person whose name is signed on the preceding or attached document in my presence.

Paula J. Edwards
Notary Public
My Commission Expires: *7/15/16*

WITNESS

Witness Signature: _____
Witness Name: _____
Witness Date: _____



PATENT