

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6393794

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|---|-----------------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| ULRICH ALFRED BRAMMER | 10/13/2020 |
| JOHANNES SEIWERT | 10/13/2020 |
| CHRISTIANE LE TIEC | 10/13/2020 |
| 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: | 16842515 |
| 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: | 6175269455 |
| Email: | dherra@proskauer.com |
| Correspondent Name: | PROSKAUER ROSE LLP |
| Address Line 1: | ONE INTERNATIONAL PLACE |
| Address Line 4: | BOSTON, MASSACHUSETTS 02110 |
| ATTORNEY DOCKET NUMBER: | ASX-189 |
| NAME OF SUBMITTER: | ALAN S. TERAN |
| SIGNATURE: | /Alan S Teran/ |
| DATE SIGNED: | 11/10/2020 |
| This document serves as an Oath/Declaration (37 CFR 1.63). | |
| Total Attachments: 6 | |
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTOR(S): Brammer *et al.* CONFIRMATION NO.: 9370
APPLICATION NO.: 16/842,515 FILING DATE: April 7, 2020
TITLE: Systems and Methods for Generating a Dissolved Ammonia Solution with
Reduced Dissolved Carrier Gas and Oxygen Content

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 to the above-identified patent application:

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, Ulrich Alfred Brammer, 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 state/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:

Ulrich Alfred Brammer
Ulrich Alfred Brammer

WITNESS

Witness Signature:

Witness Name:

Witness Date:

Inge Brabanski
INGE BRABANSKI
10/13/2020

WITNESS

Witness Signature:

Witness Name:

Witness Date:

Ralf Willner
Ralf Willner
10/13/2020

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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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, Johannes Seiwert, 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 state/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.

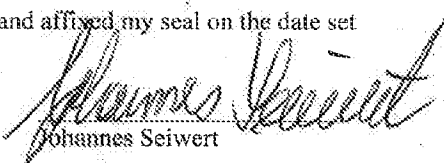
I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved.

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:



Johannes Seiwert

WITNESS

Witness Signature:

Witness Name:

Witness Date:

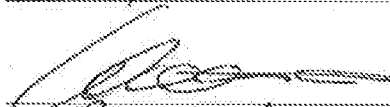

INGE BRABANSKY
10/13/2020

WITNESS

Witness Signature:

Witness Name:

Witness Date:


Ralf Willner
10/13/2020

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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, Christiane Le Tiec, 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 state/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.

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

Inventor:

Christiane Le Tiec
Christiane Le Tiec

WITNESS

Witness Signature:

Witness Name:

Witness Date:

Inge Brabamsky
INGE BRABAMSKY
10/13/2020

WITNESS

Witness Signature:

Witness Name:

Witness Date:

Ralf Willner
Ralf Willner
10/13/2020