

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Johannes Seiwert</td><td>11/13/2007</td></tr><tr><td>Ulrich Brammer</td><td>11/13/2007</td></tr><tr><td>Christiane Gottschalk</td><td>11/13/2007</td></tr><tr><td>Joachim Lohr</td><td>11/13/2007</td></tr></tbody></table>		Name	Execution Date	Johannes Seiwert	11/13/2007	Ulrich Brammer	11/13/2007	Christiane Gottschalk	11/13/2007	Joachim Lohr	11/13/2007
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RECEIVING PARTY DATA											
<table border="1"><tr><td>Name:</td><td>MKS Instruments, Inc.</td></tr><tr><td>Street Address:</td><td>90 Industrial Way</td></tr><tr><td>City:</td><td>Wilmington</td></tr><tr><td>State/Country:</td><td>MASSACHUSETTS</td></tr><tr><td>Postal Code:</td><td>01887</td></tr></table>		Name:	MKS Instruments, Inc.	Street Address:	90 Industrial Way	City:	Wilmington	State/Country:	MASSACHUSETTS	Postal Code:	01887
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
Fax Number: (617)526-9899 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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ATTORNEY DOCKET NUMBER:	ASX-117										
NAME OF SUBMITTER:	Joseph M. Maraia										
Total Attachments: 3 source=ASX_117 Assignment#page1.tif											

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ASSIGNMENT

WHEREAS, We, Johannes Seiwert, Ulrich Brammer, Christiane Gottschalk, and Joachim Lohr have invented one or more inventions described in an application (or provisional application) for Letters Patent of the United States entitled:

DEVICES, SYSTEMS, AND METHODS FOR CARBONATION OF DEIONIZED WATER

and identified by

☒ Attorney Docket No ASX-117, and

☒ Application No. 11/873,776 filed in the United States Patent Office on October 17, 2007;
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 90 Industrial Way, Wilmington, Massachusetts, 01887, desires to acquire an interest therein, in accordance with agreements duly entered into with us;

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, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, our 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 our 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 we 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 us had this assignment and sale not been made; we hereby convey all of our 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. We hereby acknowledge that this assignment, being of our 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 our entire right, title and interest therein;

AND, we hereby further agree for ourselves and our 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;

AND, we 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;

AND, we hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on the date of our execution of this assignment;

AND, we 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

IN TESTIMONY WHEREOF, we have hereunto set our hands-and affixed our seals on the date(s) set forth below

13 ^{Nov} ~~Dec~~ 2007

UR Nr. 624 / 2007
State/Commonwealth of)
County of) ss

Inventor:

Johannes Seiwert

Johannes Seiwert

Johannes Seiwert

born 30.05.1957

Swinemünder Str. 74, 13355 Berlin

On this 13 day of November, 2007, before me, the undersigned notary public, personally appeared Johannes Seiwert, proved to me through satisfactory evidence of identification, which were identity card, to be the person whose name is signed on the preceding or attached document in my presence.



Notary Public

My Commission Expires: unlimited

Inventor:

Ulrich Brammer

Ulrich Brammer

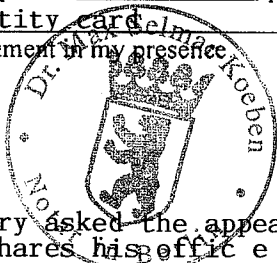
Ulrich Brammer

born 10.09.1958

Malplaquetstr. 25, 13347 Berlin

UR Nr. 625/ 2007
State/Commonwealth of)
County of) ss

On this 13 day of November, 2007, before me, the undersigned notary public, personally appeared Ulrich Brammer, proved to me through satisfactory evidence of identification, which were identity card, to be the person whose name is signed on the preceding or attached document in my presence.



Notary Public

My Commission Expires: unlimited

The Notary asked the appearing persons whether he or a person with whom the Notary shares his office had already been employed or is currently employed in this matter. The appearing persons denied.

Dr. Koeben
Dr. Koeben
Notary
Commission unlimited

UR Nr. 626 / 2007

State/Commonwealth of)
County of) ss

Inventor:

Christiane Gottschalk
Christiane Gottschalk
Christiane Gottschalk
born 01.02.1966
Fehmarner Str. 6, 13353 Berlin

On this 13 day of November, 2007, before me, the undersigned notary public, personally appeared Christiane Gottschalk, proved to me through satisfactory evidence of identification, which were identity card, to be the person whose name is signed on the preceding or attached document in my presence.



Notary Public

My Commission Expires: unlimited

UR Nr. 627/2007

State/Commonwealth of)
County of) ss

Inventor:

Joachim Lohr
Joachim Lohr
Joachim Lohr
born 04.03.1955
Holsteinische Str. 6, 10717 Berlin

On this 13 day of November, 2007, before me, the undersigned notary public, personally appeared Joachim Lohr, proved to me through satisfactory evidence of identification, which were driving license, to be the person whose name is signed on the preceding or attached document in my presence



Notary Public

My Commission Expires: unlimited

The Notary asked the appearing persons whether he or a person with whom the Notary shares his office had already been employed or is currently employed in this matter. The appearing persons denied.

Dr. Koeben
Notary
Commission unlimited

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