

PATENT ASSIGNMENT

Electronic Version v1.1
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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>Robert Krmpotich</td> <td>03/08/2012</td> </tr> <tr> <td>Paul D. Lucas</td> <td>02/16/2012</td> </tr> <tr> <td>Jaroslav W. Pisera</td> <td>03/08/2012</td> </tr> <tr> <td>David B. Chamberlain</td> <td>03/08/2012</td> </tr> </tbody> </table>		Name	Execution Date	Robert Krmpotich	03/08/2012	Paul D. Lucas	02/16/2012	Jaroslav W. Pisera	03/08/2012	David B. Chamberlain	03/08/2012		
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<table border="1"> <tr> <td>Name:</td> <td>MKS Instruments, Inc.</td> </tr> <tr> <td>Street Address:</td> <td>2 Tech Drive</td> </tr> <tr> <td>Internal Address:</td> <td>Suite 201</td> </tr> <tr> <td>City:</td> <td>Andover</td> </tr> <tr> <td>State/Country:</td> <td>MASSACHUSETTS</td> </tr> <tr> <td>Postal Code:</td> <td>01810</td> </tr> </table>		Name:	MKS Instruments, Inc.	Street Address:	2 Tech Drive	Internal Address:	Suite 201	City:	Andover	State/Country:	MASSACHUSETTS	Postal Code:	01810
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PROPERTY NUMBERS Total: 1													
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CORRESPONDENCE DATA													
<p>Fax Number: (202)756-8087 Phone: 202-756-8000 Email: ptedesco@mwe.com <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: McDermott Will & Emery LLP Address Line 1: 600 13th Street, N.W. Address Line 4: Washington, DISTRICT OF COLUMBIA 20005-3096</p>													
ATTORNEY DOCKET NUMBER:	56231-940 (MKS-207)												
NAME OF SUBMITTER:	Toby H. Kusmer												
<p>Total Attachments: 3 source=Executed Assignment#page1.tif source=Executed Assignment#page2.tif source=Executed Assignment#page3.tif</p>													

CH \$40.00 12611760

ASSIGNMENT OF PATENT RIGHTS

We, **Robert Krmpotich**, residing at **36 Hawk Drive, Salem, NH 03079**, **Paul D. Lucas** residing at **254 Porter Street, Melrose, MA 02176**, **Jaroslav W. Pisera**, residing at **50 Hancock Street, Bedford, MA 01730** and, **David B. Chamberlain**, residing at **7 Gosselin Avenue, Hooksett, NH 03106**, having invented improvements in **BUTTERFLY VALVE AND SYSTEM EMPLOYING SAME AND METHOD FOR USING SAME FILED**, and having this day executed a patent application for United States patent describing the same based thereon (and We hereby authorize our attorney(s), authorized to prosecute **U.S. Application Serial No. 12/611,760, Filed November 3, 2009**, for good and valuable consideration, receipt of which is hereby acknowledged from **MKS Instruments, Inc., a Massachusetts corporation** having its principal place of business at **2 Tech Drive, Suite 201, Andover, MA 01810** (and hereinafter called the Assignee, which term shall include its successors and assigns), do hereby sell, assign and transfer unto the Assignee, our entire right, title, and interest, in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto, in and to and under said application (which term shall include hereinafter where the context so admits all divisional, continuing, reissue and other patent applications based thereon) and the inventions (which term shall include each and every such invention, or part thereof) therein described, and any and all patents and like rights of exclusion (including extensions thereof) of any country which may be granted on or for said inventions or on said application;

And for the same consideration we do also hereby sell, assign and transfer unto the Assignee all our rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty and all other treaties of like purpose in respect of said inventions and said application, and do hereby authorize the Assignee to apply in our name or in their own name (in a manner to be agreed upon by the Assignee) or their designee, for patents and like rights of exclusion on or for said inventions in all countries, claiming (if the Assignee so desires) the priority of the filing date of said application under the provisions of said Convention, Treaty or any such other Convention or Treaty;

And for the same consideration we do hereby agree for ourselves and for our respective heirs, executors and administrators, promptly upon request of the Assignee, to execute and deliver without further compensation any power of attorney, assignment, original, divisional, continuing, reissue or other application or applications for patent or patents or like rights of exclusion of any country, or other lawful documents and any further assurances that may be deemed necessary or desirable by the Assignee fully to secure to it said right, title, and interest as aforesaid in and to said inventions, application, and said several patents and like rights of exclusion, or any of them, all, however, at the expense of the Assignee;

And we do hereby authorize and request the Commissioner of Patents of the United States of America and the corresponding Official of each country foreign thereto to issue to the Assignee any and all patents and like rights of exclusion which may be granted in any country upon said application or on or for said inventions;

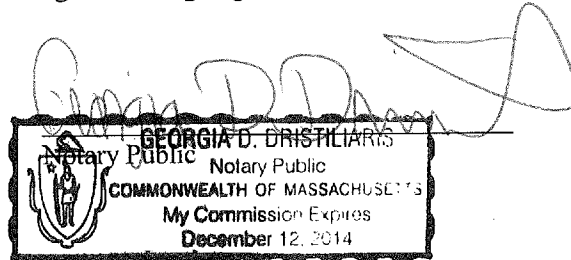
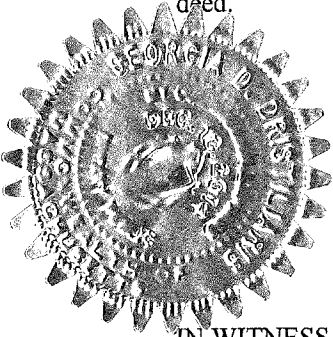
And we do hereby covenant for ourselves and for our respective legal representatives and agree with the Assignee that we have granted no right or license to make, use or sell said inventions to anyone except the Assignee, that prior to the execution of this deed my right, title and interest in and to said inventions has not been otherwise encumbered by us, and that we have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, we hereunto set our hands and seal on the day and year hereinafter noted.


 Robert Krmpotich

State of Massachusetts
 County of Essex ss.

Before me this 8th day of MARCH, year of 2012, personally appeared **Robert Krmpotich**, who is to me personally known, and acknowledged the foregoing instrument to be his free act and deed.

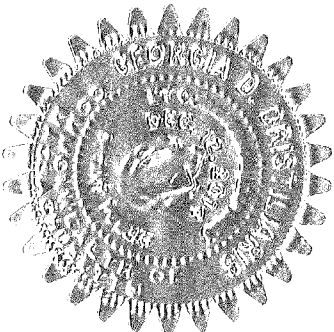



IN WITNESS WHEREOF, we hereunto set our hands and seal on the day and year hereinafter noted.

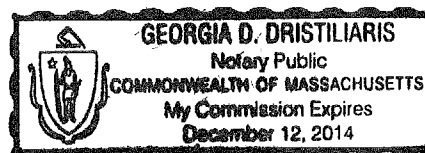

 Paul D. Lucas

State of Massachusetts
 County of Essex ss.

Before me this 16th day of FEBRUARY, year of 2012, personally appeared **Paul D. Lucas**, who is to me personally known, and acknowledged the foregoing instrument to be his free act and deed.



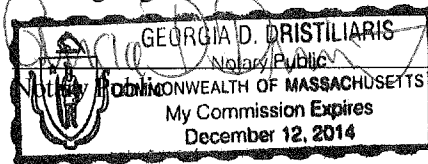
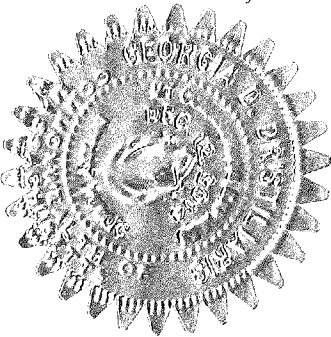

 Notary Public



Jaroslaw W. Pisera
Jaroslaw W. Pisera

State of Massachusetts)
County of Essex) ss.

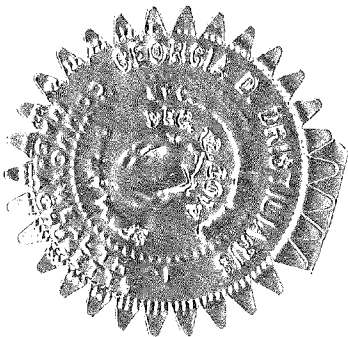
Before me this 8th day of March, year of 2012, personally appeared **Jaroslaw W. Pisera**, who is to me personally known, and acknowledged the foregoing instrument to be his free act and deed.



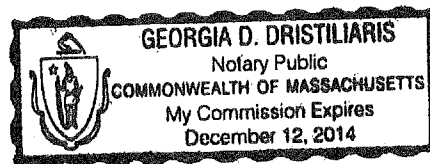
David B. Chamberlain
David B. Chamberlain

State of Massachusetts)
County of Essex) ss.

Before me this 8th day of MARCH, year of 2012, personally appeared **David B. Chamberlain**, who is to me personally known, and acknowledged the foregoing instrument to be his free act and deed.



Georgia D. Dristiliaris
Notary Public



DM_US 31815588-1.056231.0940