

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Junhua Ding	02/23/2012
RECEIVING PARTY DATA	
Name:	MKS Instruments, Inc.
Street Address:	2 Tech Drive
City:	Andover
State/Country:	MASSACHUSETTS
Postal Code:	01810
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	13252363
CORRESPONDENCE DATA	
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Phone:	617-535-4000
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<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
Correspondent Name:	McDermott Will & Emery LLP
Address Line 1:	600 13th Street, N.W.
Address Line 4:	Washington, DISTRICT OF COLUMBIA 20005-3096
ATTORNEY DOCKET NUMBER:	086400-0072 (MKS-223)
NAME OF SUBMITTER:	Toby H. Kusmer
Total Attachments: 2 source=Assignment#page1.tif source=Assignment#page2.tif	

CH \$40.00 13252363

ASSIGNMENT OF PATENT RIGHTS

I, **Junhua Ding** residing at 67 Emanuel Drive, Boxborough, MA 01719, having invented improvements in **METHOD OF AND APPARATUS FOR MULTIPLE CHANNEL**, and having this day executed a patent application for United States patent describing the same based thereon (and I hereby authorize our attorney(s), authorized to prosecute said application, to here insert the filing date and serial number of said application, when known, Serial No. 13/252,363, Filed October 4, 2011), 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, 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, the 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;

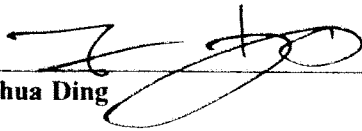
And for the same consideration I do also hereby sell, assign and transfer unto the Assignee all our rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty and all other treaties of like purpose in respect of said inventions and said application, and do hereby authorize the Assignee to apply in my 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 I do hereby agree for myself and for my 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 I 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 I do hereby covenant for myself and for my respective legal representatives and agree with the Assignee that I 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 me, and that I have not executed and will not execute any instrument in conflict herewith.

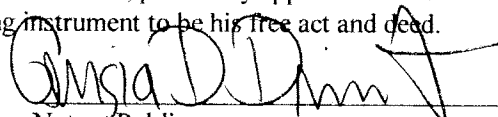
IN WITNESS WHEREOF, we hereunto set our hands and seal on the day and year hereinafter noted.



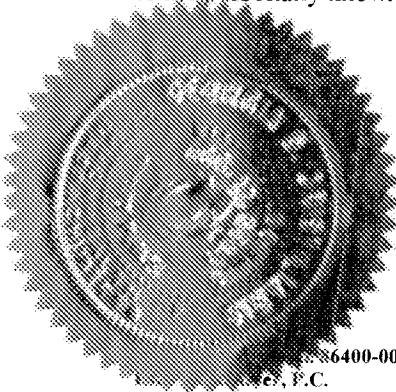
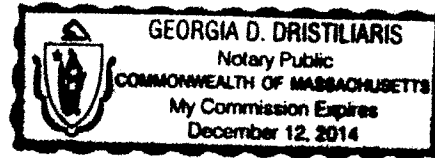
Junhua Ding

State of Massachusetts)
County of ESSEX) ss.

Before me this 23rd day of February, year of 2012, personally appeared Junhua Ding, who is to me personally known, and acknowledged the foregoing instrument to be his free act and deed.



Notary Public



086400-0072 (MSK-223)
e, P.C.
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