

01-13-2003

2003 JAN -6 AM 10:01  
FINANCE SECTION



102424943  
RECORDATION FORM COVER SHEET  
PATENTS ONLY

OFFICE OF PUBLIC RECORDS  
2003 JAN 06 AM 10:01  
FINANCE SECTION

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

New

Resubmission (Non-Recordation)  
Document ID#

Correction of PTO Error  
Reel #  Frame #

Corrective Document  
Reel #  Frame #

Conveyance Type

Assignment  Security Agreement

License  Change of Name

Merger  Other

**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)

Departmental File  Secret File

Conveying Party(ies)

Mark if additional names of conveying parties attached

Name (line 1)  Execution Date Month  Day  Year

Name (line 2)

**Second Party**

Name (line 1)  Execution Date Month  Day  Year

Name (line 2)

Receiving Party

Mark if additional names of receiving parties attached

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City State/Country Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

01/10/2003 LUMPELLER 00000195 501133 10178261  
01 FC:8021 40.00 CH

FOR OFFICE USE ONLY

**Correspondent Name and Address**

Area Code and Telephone Number

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

**Pages** Enter the total number of pages of the attached conveyance document including any attachments. #

**Application Number(s) or Patent Number(s)**  Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

<input type="text" value="10/178,261"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

If this document is being filed together with a new Patent Application, enter the date the patent application was  Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT <input type="text"/>	PCT <input type="text"/>	PCT <input type="text"/>
PCT <input type="text"/>	PCT <input type="text"/>	PCT <input type="text"/>

**Number of Properties** Enter the total number of properties involved. #

**Fee Amount** Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment: Enclosed  Deposit Account

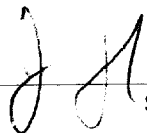
Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the Deposit Account Number: #

Authorization to charge additional fees: Yes  No

**Statement and Signature**

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

James W. Wiegand  
Name of Person Signing

  
Signature

12/30/02  
Date

# RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

## Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Execution Date  
Month Day Year

Name (line 2)

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

## Receiving Party

Mark if additional names of receiving parties attached

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)     
City State/Country Zip Code

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)     
City State/Country Zip Code

## Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

FORM PTO-1595 (Modified)  
(Rev. 03-01,  
CME No. 0651-0027 (exp 5/31/2002)  
P08/REV03

09-11-2002



102217156

R SHEET  
LY

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Tab settings → → → ▼

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
Ali Shajii  
Nicholas Kottenstette  
Jess Ambrosina

9-9-02

2. Name and address of receiving party(ies):

Name: MKS Instruments, Inc.

Internal Address:

Additional names(s) of conveying party(ies)  Yes  No

3. Nature of conveyance:

- Assignment  Merger
- Security Agreement  Change of Name
- Other

Street Address: Six Shattuck Road

City: Andover State: MA ZIP: 01810

Execution Date:

Additional name(s) & address(es) attached?  Yes  No

4. Application number(s) or patent numbers(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

10/178,261

Filed June 24, 2002

B. Patent No.(s)

Additional numbers attached?  Yes  No

OFFICE OF RECORDS  
2002 SEP -9 AM 9:01  
FINANCE SECTION

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Toby H. Kusmer

Internal Address: McDermott, Will & Emery

Street Address: 28 State Street

6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41):.....\$ 40.00

Enclosed - Any excess or insufficiency should be credited or debited to deposit account

Authorized to be charged to deposit account

8. Deposit account number:

50-1133

(Attach duplicate copy of this page if paying by deposit account)

09/10/2002 DAYME 00000207 10178261

01 FEB 5 2003 Boston 40.00 DP State: MA ZIP: 02109

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

James W. Wiegand

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: 5

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments

**ASSIGNMENT OF PATENT RIGHTS**

We, **Ali Shajii**, 26 Sandish Drive, Canton, MA 02021, **Nicholas Kottenstette**, 37 Olive Street, Newburyport, MA 01950, and **Jesse Ambrosina** 11 Boxford Road, Topsfield, MA 01950 for good and valuable consideration paid to us by

**MKS INSTRUMENTS, INC.**

a Massachusetts Corporation having a principal place of business at Six Shattuck Road, Andover, Massachusetts 01810, U.S.A., the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

**MKS INSTRUMENTS, INC.**

its successors and assigns, our entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

**APPARATUS AND METHOD FOR MASS FLOW CONTROLLER WITH A PLURALITY OF CLOSED LOOP CONTROL CODE SETS**

described in United States non-provisional patent application Serial No. **10/178,261**, filed on **June 24, 2002**, (authorizing our attorney(s), who are authorized to prosecute said application, to here insert the filing date and serial number of said application, when known), and all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or any non-provisional, divisional, continuing, reissue or other applications based in whole or in part on said provisional and non-provisional application(s).

And we agree for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense and charges, hereafter to execute all applications, amended specifications, deed or other instrument, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

## CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s), or §365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status (patented, pending, abandoned)

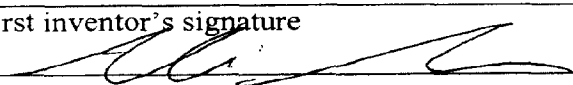
POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

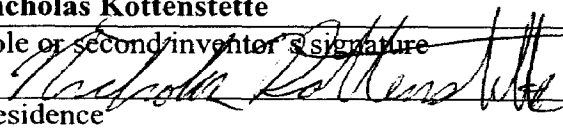
Toby H. Kusmer	Reg. No. 26,418	Elizabeth E. Kim	Reg. No. 43,334
Mark G. Lappin	Reg. No. 26,618	Jeffrey J. Miller	Reg. No. 39,773
Scott A. Ouellette	Reg. No. 38,573	John T. Prince	Reg. No. 43,019
David M. Mello	Reg. No. 43,799	Ronald R. Demsher	Reg. No. 42,478
James W. Wiegand	Reg. No. 39,423		

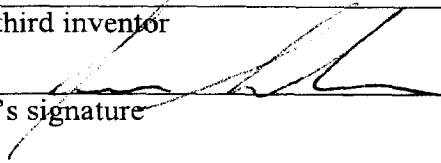
Send Correspondence to: Toby H. Kusmer, Esq.  
McDERMOTT, WILL & EMERY  
28 State Street, Boston, MA 02109

Direct Telephone Calls to: Toby Kusmer at Tel (617) 535-4000; and Fax (617) 535-3800

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of sole or first inventor	
<b>Ali Shajii</b>	
Sole or first inventor's signature	Date
	8/11/02
Residence	
<b>26 Standish Drive, Canton, Massachusetts 02021</b>	
Citizenship	
<b>Iran</b>	
Post Office Address	
<b>26 Standish Drive, Canton, Massachusetts 02021</b>	

Full Name of sole or second inventor	
<b>Nicholas Kottenstette</b>	
Sole or second inventor's signature	Date
	8/1/2002
Residence	
<b>37 Olive Street, Newburyport, Massachusetts 01950</b>	
Citizenship	
<b>USA</b>	
Post Office Address	
<b>37 Olive Street, Newburyport, Massachusetts 01950</b>	

Full Name of sole or third inventor <b>Jesse Ambrosina</b>	
Sole or third inventor's signature	Date <b>8/1/02</b>
Residence <b>11 Boxford Road, Topsfield, Massachusetts 01950</b>	
Citizenship <b>USA</b>	
Post Office Address <b>11 Boxford Road, Topsfield, Massachusetts 01950</b>	