102345383

U.S. DEPARTMENT OF COMMERCE

Atty. Docket No.: UOM 0239 PUSP

FORM PTO-UPFICE OF PUBLIC RECORDECOK

2003 JAN 21 PM 2: 48

(Modified)

PATENTS ONLY

Patent and Trademark Office

To the Director after United States Patent and Trademark Office: Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):	
Shuichi Takayama; Joseph Chang; Dongeun Huh; Xiaoyue Zhu; Brenda Cho; Gary D. Smith	Name: The Regents of the University of Michigan	
Additional name(s) of conveying party(ies) attached? Yes X No		
3. Nature of conveyance:	Street Address: 3003 S. State Street	
X AssignmentMerger		
Security AgreementChange of Name	City: Ann Arbor State: MI Zip: 48109	
Other	Additional name(s) & address(es) attached?YesXNo	
Execution Date: September 20, 2002; December 18, 2002; October 4, 2002; September 13, 2002; November 13, 2002; September 13, 2002		
4. Application number(s) or patent number(s):		
If this document is being filed together with a new application, the	e execution date of the application is:	
A. Patent Application No.(s) 10/198,477	B. Patent No.(s)	
Additional numbers attach	ed?YesXNo	
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: One	
	6. Total number of applications and patents involved: One 7. Total Fee (37 C.F.R. § 1.21(h))	
concerning document should be mailed:		
Name: William G. Conger Address: Brooks & Kushman P.C. 1000 Town Center, Twenty-Second Floor	7. Total Fee (37 C.F.R. § 1.21(h)) \$40.00	
concerning document should be mailed: Name: William G. Conger Address: Brooks & Kushman P.C. 1000 Town Center, Twenty-Second Floor City: Southfield State: MI ZIP: 48075	7. Total Fee (37 C.F.R. § 1.21(h)) \$40.00	
Name: William G. Conger Address: Brooks & Kushman P.C. 1000 Town Center, Twenty-Second Floor	7. Total Fee (37 C.F.R. § 1.21(h))	
concerning document should be mailed: Name: William G. Conger Address: Brooks & Kushman P.C. 1000 Town Center, Twenty-Second Floor City: Southfield State: MI ZIP: 48075 01/22/2003 TDIRZ1 00000154 10198477 01 FC:8021 40.00 OP	7. Total Fee (37 C.F.R. § 1.21(h))	
concerning document should be mailed: Name: William G. Conger Address: Brooks & Kushman P.C. 1000 Town Center, Twenty-Second Floor City: Southfield State: MI ZIP: 48075 01/22/2003 TDIRZ1 00000154 10198477 01 FC:8021 40.00 OP	7. Total Fee (37 C.F.R. § 1.21(h))	
concerning document should be mailed: Name: William G. Conger Address: Brooks & Kushman P.C. 1000 Town Center, Twenty-Second Floor City: Southfield State: MI ZIP: 48075 01/22/2003 TDTRZ1 00000154 10198477 01 FC:8021 DO NOT USI 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is tr document. William G. Conger	7. Total Fee (37 C.F.R. § 1.21(h))	
concerning document should be mailed: Name: William G. Conger Address: Brooks & Kushman P.C. 1000 Town Center, Twenty-Second Floor City: Southfield State: MI ZIP: 48075 01/22/2003 TDTRZ1 00000154 10198477 01 FC:8021 DO NOT USI 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is tr document. William G. Conger	7. Total Fee (37 C.F.R. § 1.21(h))	

ASSIGNMENT

For the sum of One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, we Shuichi Takayama of 3550 Dixboro Lane, Ann Arbor, MI 48105; Joseph Chang of 1117 Nielsen Court #4, Ann Arbor, MI 48105; Dongeun Huh of 1104 Maiden Lane Court, Apt. #108, Ann Arbor, MI 48105; Xiaoyue Zhu of 1865 Lake Lila Lane, Apt. B4, Ann Arbor, MI 48105-2133; Brenda Cho, 879 Greenhills Drive, Ann Arbor, MI 48105; and Gary D. Smith, 1325 Olivia Avenue, Ann Arbor, MI 48104, do hereby assign, sell and set over to The Regents of the University of Michigan, a non-profit corporation organized and existing under the laws of the State of Michigan and having a place of business at 3003 S. State Street, Ann Arbor, Michigan 48109, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in

MICROFLUIDIC GRAVITY PUMP WITH CONSTANT FLOW RATE

	states Letters Patent executed by us on the y of, 2002, the day of,
$\overline{2002}$, the day of , 2002 , the	heday of, 2002, and on the
	for which an application for a United States
Patent was filed on July 18, 2002, Ap	
,,	.,
and as set forth in PCT International A	Application Number PCT/US02/22902, filed
	on the above dates (we hereby authorize our
· · · · · · · · · · · · · · · · · · ·	ng date and number and PCT International
Application Number and filing date w	
	•
•	cessors, assigns or other legal representatives to make said inventions and discoveries in any and all foreign
* *	our names, at its or their election, and we hereby assign,
	sors, assigns or other legal representatives, all rights of
	n all countries, including all applications claiming benefit
	nations-in-part, divisionals, reexaminations and reissue
applications.	
• • •	selves, our heirs, successors, assigns or other legal luding applications for Letters Patent of any and all kinds
• · · · · · · · · · · · · · · · · · · ·	nd all acts which said ASSIGNEE, its successors, assigns
•	ry to secure thereto the rights herein assigned, sold and
set over.	-,,,,
And we hereby represent and war	rant that we have not granted any rights inconsistent with
the rights granted herein.	_
	11/11
Date: [201/20]	There to always
Date: Sept. 20 , 2002	Shuichi Takayama
Date: , 2002	
	Joseph Chang
-	
Date:, 2002	Donosan Mak
	Dongeun Huh

Date:,	2002	
		Xiaoyue Zhu
Date:,	2002	
		Brenda Cho
Date:,	2002	
		Gary D. Smith
STATE OF Michigan COUNTY OF WAShknow)) ss. ♥)	
On this $\mathcal{G}\mathcal{D}$	_ day of <u>Sepkmbv</u> , 2 amed in and who execut	2002, personally appeared before me Shuichi Takayama , to ed the above instrument, and acknowledged that he executed the Notary Public
(SEAL)		My Commission expires:
COUNTY OFOn this me known to be the person na same for the uses and purpose	day of amed in and who execute	SANDRA A. STANETT NOTARY PUBLIC WAYNE CO. MALL COMMISSION EXPIRES M. R. 2005 ACTING IN WASHTENAM COUNTY, M. , 2002, personally appeared before me Joseph Chang, to ed the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF)	
COUNTY OF) ss.)	·
	amed in and who execute	, 2002, personally appeared before me Dongeun Huh , to ed the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:

STATE OF	.)	
COUNTY OF) ss. _)	
On this me known to be the person r same for the uses and purpo	named in and who execu	, 2002, personally appeared before me Xiaoyue Zhu , to sted the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.	
On this	day of named in and who execu	, 2002, personally appeared before me Brenda Cho , to ted the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.	
COUNTY OF	.)	
On this to me known to be the person the same for the uses and put	day ofn named in and who ex- rposes therein mention	, 2002, personally appeared before me Gary D. Smith , ecuted the above instrument, and acknowledged that he executed ed.
		Notary Public My Commission expires:
(SEAL)		

ASSIGNMENT

For the sum of One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, we Shuichi Takayama of 3550 Dixboro Lane, Ann Arbor, MI 48105; Joseph Chang of 1117 Nielsen Court #4, Ann Arbor, MI 48105; Dongeun Huh of 1104 Maiden Lane Court, Apt. #108, Ann Arbor, MI 48105; Xiaoyue Zhu of 1865 Lake Lila Lane, Apt. B4, Ann Arbor, MI 48105-2133; Brenda Cho, 879 Greenhills Drive, Ann Arbor, MI 48105; and Gary D. Smith, 1325 Olivia Avenue, Ann Arbor, MI 48104, do hereby assign, sell and set over to The Regents of the University of Michigan, a non-profit corporation organized and existing under the laws of the State of Michigan and having a place of business at 3003 S. State Street, Ann Arbor, Michigan 48109, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in

MICROFLUIDIC GRAVITY PUMP WITH CONSTANT FLOW RATE

set forth in an application for United States Letters Patent executed by us on the day of, 2002, the day of, 2002, the day of, 2002, the day of, 2002, and on the day of, 2002, respectively.
day of, 2002, respectively; for which an application for a United States Patent was filed on July 18, 2002, Application No. 10/198,477;
and as set forth in PCT International Application Number PCT/US02/22902, filed on July 18, 2002 and executed by us on the above dates (we hereby authorize our attorney to insert the application filing date and number and PCT International Application Number and filing date when they become known),
including the right of said ASSIGNEE, its successors, assigns or other legal representatives to make applications and to receive Letters Patent for said inventions and discoveries in any and all foreign countries in its or their own name or names, or in our names, at its or their election, and we hereby assign sell and set over to said ASSIGNEE, its successors, assigns or other legal representatives, all rights of priority in and to said inventions and discoveries in all countries, including all applications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, reexaminations and reissue applications.
And we hereby agree for ourselves, our heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries and to perform any and all acts which said ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein assigned, sold and set ower.
And we hereby represent and warrant that we have not granted any rights inconsistent with the rights granted herein.
Date:, 2002
Date: 12 / 18 , 2002 Joseph Chang
Date:, 2002

Date:	, 2002	
		Xiaoyue Zhu
Date:	, 2002	
		Brenda Cho
Date:	. 2002	
	_, _002	Gary D. Smith
STATE OF	_)	
COUNTY OF) ss.)	
On this me known to be the person same for the uses and purp	named in and who execu	2002, personally appeared before me Shuichi Takayama , to sted the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF	_)	
COUNTY OF) ss.)	
On this me known to be the person same for the uses and purpo	named in and who execu	, 2002, personally appeared before me Joseph Chang , to ted the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF	_)	
COUNTY OF) ss. _)	
On this me known to be the person same for the uses and purpo	named in and who execu	, 2002, personally appeared before me Dongeun Huh , to ted the above instrument, and acknowledged that he executed the
		Notary Public My Commission expires:
(SEAL)		- -

STATE OF	_)	
COUNTY OF) ss. _)	
On this me known to be the person resame for the uses and purpo	named in and who ϵ	, 2002, personally appeared before me Xiaoyue Zhu , to executed the above instrument, and acknowledged that he executed the ned.
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.	
COUNTY OF	_)	
On this me known to be the person resame for the uses and purpo	named in and who e	, 2002, personally appeared before me Brenda Cho , to executed the above instrument, and acknowledged that he executed the ned.
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.	
COUNTY OF	.)	
On this to me known to be the person the same for the uses and pu	n named in and wh	, 2002, personally appeared before me Gary D. Smith , to executed the above instrument, and acknowledged that he executed attioned.
(SEAL)		Notary Public My Commission expires:

ASSIGNMENT

For the sum of One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, we Shuichi Takayama of 3550 Dixboro Lane, Ann Arbor, MI 48105; Joseph Chang of 1117 Nielsen Court #4, Ann Arbor, MI 48105; Dongeun Huh of 1104 Maiden Lane Court, Apt. #108, Ann Arbor, MI 48105; Xiaoyue Zhu of 1865 Lake Lila Lane, Apt. B4, Ann Arbor, MI 48105-2133; Brenda Cho, 879 Greenhills Drive, Ann Arbor, MI 48105; and Gary D. Smith, 1325 Olivia Avenue, Ann Arbor, MI 48104, do hereby assign, sell and set over to The Regents of the University of Michigan, a non-profit corporation organized and existing under the laws of the State of Michigan and having a place of business at 3003 S. State Street, Ann Arbor, Michigan 48109, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in

MICROFLUIDIC GRAVITY PUMP WITH CONSTANT FLOW RATE

day of, 2002, the	ted States Letters Patent executed by us on the day of, 2002, the day of,
day of, 2002, respectivel	2, the day of, 2002, and on the ly; for which an application for a United States
Patent was filed on July 18, 2002,	, Application No. 10/198,477;
on July 18, 2002 and executed by	al Application Number PCT/US02/22902, filed us on the above dates (we hereby authorize our filing date and number and PCT International te when they become known),
applications and to receive Letters Patent for countries in its or their own name or names, or sell and set over to said ASSIGNEE, its succeptionity in and to said inventions and discovering	successors, assigns or other legal representatives to make for said inventions and discoveries in any and all foreign r in our names, at its or their election, and we hereby assign, cessors, assigns or other legal representatives, all rights of ies in all countries, including all applications claiming benefit attinuations-in-part, divisionals, reexaminations and reissue
representatives to execute any and all papers, and in any and all countries and to perform an	ourselves, our heirs, successors, assigns or other legal including applications for Letters Patent of any and all kinds by and all acts which said ASSIGNEE, its successors, assigns essary to secure thereto the rights herein assigned, sold and
And we hereby represent and we the rights granted herein.	warrant that we have not granted any rights inconsistent with
Date:, 2002	:
, 555	Shuichi Takayama
Date:, 2002	Jacomb Chaus
Date: 10/4, 2002	Joseph Chang July luh
	Dongeun Huh

Date:	, 2002	Xiaoyue Zhu
Date:	2002	indeg de Lita
Date.	, 2002	Brenda Cho
Date:	, 2002	
		Gary D. Smith
STATE OF)	
STATE OF) ss.)	
On this me known to be the pers same for the uses and pu	on named in and who	, 2002, personally appeared before me Shuichi Takayama , to executed the above instrument, and acknowledged that he executed the ned.
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.	
On this	day ofon named in and who	, 2002, personally appeared before me Joseph Chang , to executed the above instrument, and acknowledged that he executed the ened.
(SEAL)		Notary Public My Commission expires:
STATE OF)	
COUNTY OF) ss.)	
On this me known to be the personant for the uses and pro-	son named in and who	
		Notary Public
(SEAL)		My Commission expires:

STATE OF)) ss.	
COUNTY OF) ss.)	
On this me known to be the person na same for the uses and purpos	day of nmed in and who exec es therein mentioned	, 2002, personally appeared before me Xiaoyue Zhu , to cuted the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.	
COUNTY OF)	
On this me known to be the person na same for the uses and purpos	amed in and who exec	, 2002, personally appeared before me Brenda Cho , to cuted the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.	
On this	day of named in and who e	, 2002, personally appeared before me Gary D. Smith , executed the above instrument, and acknowledged that he executed oned.
(SEAL)		Notary Public My Commission expires:

ASSIGNMENT

For the sum of One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, we Shuichi Takayama of 3550 Dixboro Lane, Ann Arbor, MI 48105; Joseph Chang of 1117 Nielsen Court #4, Ann Arbor, MI 48105; Dongeun Huh of 1104 Maiden Lane Court, Apt. #108, Ann Arbor, MI 48105; Xiaoyue Zhu of 1865 Lake Lila Lane, Apt. B4, Ann Arbor, MI 48105-2133; Brenda Cho, 879 Greenhills Drive, Ann Arbor, MI 48105; and Gary D. Smith, 1325 Olivia Avenue, Ann Arbor, MI 48104, do hereby assign, sell and set over to The Regents of the University of Michigan, a non-profit corporation organized and existing under the laws of the State of Michigan and having a place of business at 3003 S. State Street, Ann Arbor, Michigan 48109, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in

MICROFLUIDIC GRAVITY PUMP WITH CONSTANT FLOW RATE

day of, 2002, the day of, 2002, the day of, 2002, respective Patent was filed on July 18, 200	United States Letters Patent executed by us on the, day of, 2002, the day of, 2002, and on the, vely; for which an application for a United States 02, Application No. 10/198,477;
on July 18, 2002 and executed to attorney to insert the application	onal Application Number PCT/US02/22902, filed by us on the above dates (we hereby authorize our on filing date and number and PCT International date when they become known),
applications and to receive Letters Paten countries in its or their own name or names sell and set over to said ASSIGNEE, its s priority in and to said inventions and discov	ts successors, assigns or other legal representatives to make t for said inventions and discoveries in any and all foreign , or in our names, at its or their election, and we hereby assign, uccessors, assigns or other legal representatives, all rights of eries in all countries, including all applications claiming benefit continuations-in-part, divisionals, reexaminations and reissue
representatives to execute any and all paper and in any and all countries and to perform	r ourselves, our heirs, successors, assigns or other legalists, including applications for Letters Patent of any and all kinds any and all acts which said ASSIGNEE, its successors, assigns eccessary to secure thereto the rights herein assigned, sold and
And we hereby represent an the rights granted herein.	nd warrant that we have not granted any rights inconsistent with
Date:, 2002	Shuichi Takayama
Date:, 2002	Joseph Chang
Date:, 2002	Dongeun Huh

Date: Stpt 13,	2002	Xiaoyue Zhu Xiaoyue Zhu
Date:,	2002	Brenda Cho
Date:,	2002	Gary D. Smith
STATE OF)) ss.)	
On this me known to be the person na same for the uses and purpos	amed in and who execu	2002, personally appeared before me Shuichi Takayama , to ted the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.)	
On this me known to be the person na same for the uses and purpose	imed in and who execu	, 2002, personally appeared before me Joseph Chang , to ted the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.	
	day of amed in and who execu	, 2002, personally appeared before me Dongeun Huh , to ted the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:

STATE OF Michigan) ss. COUNTY OF Wash know)	
COUNTY OF Wash knaw) ss.	
	star, 2002, personally appeared before me Xiaoyue Zhu , to steed the above instrument, and acknowledged that he executed the
(SEAL)	Notary Public My Commission expires: SANDRA A. STANEFF NOTARY PUBLIC WAYNE CO., MI MY COMMISSION EXPIRES AM 8, 2005 ACTING IN WASHTENAM COUNTY, MI
STATE OF)	
STATE OF	
On this day of me known to be the person named in and who execusame for the uses and purposes therein mentioned.	, 2002, personally appeared before me Brenda Cho , to sted the above instrument, and acknowledged that he executed the
(SEAL)	Notary Public My Commission expires:
STATE OF	
	, 2002, personally appeared before me Gary D. Smith , ecuted the above instrument, and acknowledged that he executed ed.
(SEAL)	Notary Public My Commission expires:

ASSIGNMENT

For the sum of One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, we Shuichi Takayama of 3550 Dixboro Lane, Ann Arbor, MI 48105; Joseph Chang of 1117 Nielsen Court #4, Ann Arbor, MI 48105; Dongeun Huh of 1104 Maiden Lane Court, Apt. #108, Ann Arbor, MI 48105; Xiaoyue Zhu of 1865 Lake Lila Lane, Apt. B4, Ann Arbor, MI 48105-2133; Brenda Cho, 879 Greenhills Drive, Ann Arbor, MI 48105; and Gary D. Smith, 1325 Olivia Avenue, Ann Arbor, MI 48104, do hereby assign, sell and set over to The Regents of the University of Michigan, a non-profit corporation organized and existing under the laws of the State of Michigan and having a place of business at 3003 S. State Street, Ann Arbor, Michigan 48109, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in

MICROFLUIDIC GRAVITY PUMP WITH CONSTANT FLOW RATE

day of, 2002, the d	d States Letters Patent executed by us on the lay of, 2002, the day of,
2002, the day of, 2002,	theday of, 2002, and on the
day of, 2002, respectively;	for which an application for a United States
Patent was filed on July 18, 2002, A	application No. 10/198,477;
and as set forth in PCT International	Application Number PCT/US02/22902, filed
	on the above dates (we hereby authorize our
attorney to insert the application fil	ing date and number and PCT International
Application Number and filing date	
	•
	ecessors, assigns or other legal representatives to make
	said inventions and discoveries in any and all foreign
	n our names, at its or their election, and we hereby assign,
	ssors, assigns or other legal representatives, all rights of
	in all countries, including all applications claiming benefit
	nuations-in-part, divisionals, reexaminations and reissue
applications.	
And we hereby agree for our	rselves, our heirs, successors, assigns or other legal
	cluding applications for Letters Patent of any and all kinds
	and all acts which said ASSIGNEE, its successors, assigns
	ary to secure thereto the rights herein assigned, sold and
set over.	
· · · · · · · · · · · · · · · · · · ·	rrant that we have not granted any rights inconsistent with
the rights granted herein.	
Date:, 2002	
, 2002	Shuichi Takayama
	•
Date:, 2002	
	Joseph Chang
2002	
Date:, 2002	Dongeun Huh
	Dongeon run

Date:	, 2002	
Date: 10 /14 11/13	, 2002	Miaoyue Zhu Brenda Cho Brenda Cho Brenda Cho
Date:	, 2002	Gary D. Smith
STATE OF		
	amed in and who execut	2002, personally appeared before me Shuichi Takayama , to ed the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.)	
	amed in and who execute	, 2002, personally appeared before me Joseph Chang , to ed the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.	
On this	amed in and who execute	, 2002, personally appeared before me Dongeun Huh , to ed the above instrument, and acknowledged that he executed the
(SEAL)		Notary Public My Commission expires:

STATE OF		
STATE OF) ss.)	
On this me known to be the person same for the uses and purp	day of named in and who eposes therein mention	, 2002, personally appeared before me Xiaoyue Zhu , to executed the above instrument, and acknowledged that he executed the med.
(SEAL)		Notary Public My Commission expires:
STATE OF HICHIGA	~)	
STATE OF MICHIGA COUNTY OF WASHTO) ss. <u>E</u> nain	
On this me known to be the person same for the uses and purp	named in and who e	executed the above instrument, and acknowledged that he executed the ned. Notary Public
(SEAL)		Notary Public My Commission expires: My Commission expires: NOTARY PUBLIC STATE OF MICHIGAN WASHTENAW COUNTY MY COMMISSION EXP. MAY 11,2006
STATE OF		
STATE OF) ss.)	
On this to me known to be the pers the same for the uses and p	son named in and wh	, 2002, personally appeared before me Gary D. Smith , no executed the above instrument, and acknowledged that he executed attioned.
(SEAL)		Notary Public My Commission expires:

ASSIGNMENT

For the sum of One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, we Shuichi Takayama of 3550 Dixboro Lane, Ann Arbor, MI 48105; Joseph Chang of 1117 Nielsen Court #4, Ann Arbor, MI 48105; Dongeun Huh of 1104 Maiden Lane Court, Apt. #108, Ann Arbor, MI 48105; Xiaoyue Zhu of 1865 Lake Lila Lane, Apt. B4, Ann Arbor, MI 48105-2133; Brenda Cho, 879 Greenhills Drive, Ann Arbor, MI 48105; and Gary D. Smith, 1325 Olivia Avenue, Ann Arbor, MI 48104, do hereby assign, sell and set over to The Regents of the University of Michigan, a non-profit corporation organized and existing under the laws of the State of Michigan and having a place of business at 3003 S. State Street, Ann Arbor, Michigan 48109, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in

MICROFLUIDIC GRAVITY PUMP WITH CONSTANT FLOW RATE

set forth in an application for United States Letters Patent executed by us on the

2002, the d day of	lay of, 2002, 1 , 2002, respectively;	ay of, 2002, the day of, the day of, 2002, and on the for which an application for a United States pplication No. 10/198,477;
on July 18, 200 attorney to inse	22 and executed by us ert the application file	Application Number PCT/US02/22902, filed on the above dates (we hereby authorize our ing date and number and PCT International when they become known),
applications and to rece countries in its or their ov sell and set over to said priority in and to said invo	eive Letters Patent for wn name or names, or in ASSIGNEE, its succes entions and discoveries	cessors, assigns or other legal representatives to make said inventions and discoveries in any and all foreign our names, at its or their election, and we hereby assign, sors, assigns or other legal representatives, all rights of in all countries, including all applications claiming benefit uations-in-part, divisionals, reexaminations and reissue
representatives to execute and in any and all countri	e any and all papers, inc ies and to perform any a	selves, our heirs, successors, assigns or other legal cluding applications for Letters Patent of any and all kinds and all acts which said ASSIGNEE, its successors, assigns ary to secure thereto the rights herein assigned, sold and
And we h the rights granted herein	• •	rrant that we have not granted any rights inconsistent with
Date:	_, 2002	Shuichi Takayama
Date:	_, 2002	Joseph Chang
Date:	_, 2002	Dongeun Huh

Date:	, 2002	
		Xiaoyue Zhu
Date:	, 2002	
		Brenda Cho
Date: 9-13-	, 2002	Gary D. Smith
STATE OF)	
COUNTY OF) ss.	
On this me known to be the personance for the uses and pu	on named in and who	, 2002, personally appeared before me Shuichi Takayama , to executed the above instrument, and acknowledged that he executed the ioned.
(SEAL)		Notary Public My Commission expires:
STATE OF)) ss.	
COUNTY OF)	
On this _ me known to be the perso same for the uses and pur	on named in and who	, 2002, personally appeared before me Joseph Chang , to executed the above instrument, and acknowledged that he executed the oned.
(SEAL)		Notary Public My Commission expires:
STATE OF) 00	
COUNTY OF)	
On this _ me known to be the perso same for the uses and pur	on named in and who	, 2002, personally appeared before me Dongeun Huh , to executed the above instrument, and acknowledged that he executed the oned.
		Notary Public
(SEAL)		My Commission expires:

STATE OF	_)	
) ss.	
COUNTY OF	_)	
On this me known to be the person same for the uses and purp	named in and who e	, 2002, personally appeared before me Xiaoyue Zhu , to executed the above instrument, and acknowledged that he executed the ned.
(SEAL)		Notary Public My Commission expires:
STATE OF) .) ss.)	
On this me known to be the person same for the uses and purp	named in and who e	, 2002, personally appeared before me Brenda Cho , to executed the above instrument, and acknowledged that he executed the ned.
(SEAL)		Notary Public My Commission expires:
STATE OF Michgan COUNTY OF Masken)) ss. <u>k</u> w)	
On this to me known to be the pers the same for the uses and p	son named in and wh	no executed the above instrument, and acknowledged that he executed intioned.
(SEAL)		Notary Public My Commission expires: 09/11/2005 JANE E. JUCKNO Notary Public, Livingston County, 7 Acting in Washingaw Go., 154 My Commission Expires 03/11/200