Form Tro-1595
1-1102
1999 DEC 14 PM 12: 15
RECORL
OPR/FINANCE

01-27-2000



101251393

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

### **PATENTS ONLY**

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.			
1. Name of conveying party(ies): Andrew Scott Lawing; Herbert H. Sawin; Jane P. Chang; Zhe Zhang; Han Xu	2. Name and address of receiving party(ies): Name: Massachusetts Institute of Technology		
Additional name(s) of conveying party(ies) attached? □ Yes ⊠ No	Internal Address: Street Address: 77 Massachusetts Avenue, E32-300		
3. Nature of Conveyance:	City: Cambridge State: MA Zip: 02139  Additional name(s) & address(es) attached? □ Yes ☒ No		
4. Application number(s) or patent number(s): If this document is being filed with a new application	, the execution date of the application is:		
A. Patent Application No.(s) 09/051,686	B. Patent No.(s)		
Additiona	numbers attached? □ Yes ⊠ No		
5. Name and address of party to whom correspondence concerning document should be	6. Total number of applications and patents involved: 1		
mailed: Walter J. Steinkraus, Esq. Vidas, Arrett & Steinkraus, P.A. Suite 2000, 6109 Blue Circle Drive Minnetonka, MN 55343-9131	7. Total fee (37 CFR 3.41): \$ 40.00  ☑ Enclosed ☐ Authorized to be charged to deposit account  8. Deposit Account Number: 22-0350		
(Attach duplicate of this page if paying by deposit account)  DO NOT USE THIS SPACE			
9. Statement and signature.  To the best of my knowledge and belief, the foregothe original document.	ing information is true and correct and any attached copy is a true copy of		
Walter J. Steinkraus	Signature, Date &		
	Total number of pages including cover sheet, attamments, and document:6		
OMB No. 0651-011 (exp. 4/94)	8		
	Oo not detach this portion		
	Heet information to: ioner of Patents and Trademarks  Box Assignments  Washington, D.C. 20231		
	01/25/20 01 FC:581		

PATENT REEL: 010498 FRAME: 0232

#### ASSIGNMENT

WHEREAS, we, Andrew Scott Lawing; Herbert H. Sawin; Jane Chang; Zhe Zhar g; Han Xu residing at 8809 S. Pointe Pkwy E., #2167, Phoenix, AZ 85044; 15 Larkin Road, Chestnut H II, MA 02147; 25 Hickory Place, Apt. #H27, Chatham, NJ 07928; 170 Giotto, Irvine, CA 92614; 19 Ru vson Avenue, Lexington, MA 02173 have invented and own the entire United States right, title and interest in an invention for:

#### METALS REMOVABLE PROCESS

disclosed in my application for United States Letter Patent filed:

- concurrently herewith
- on October 1, 1998 and assigned Serial No. 09/051,686; and

I hereby authorize and request any attorney of Vidas, Arrett & Steinkraus, P.A., Suite 2 100, 6109 Blue Circle Drive, Minnetonka, MN 55343-9131, to insert the filing date and application number of said application above when known.

WHEREAS, Massachusetts Institute of Technology ("Assignee"), a corporation organized and existing under and by virtue of the laws of the State of Massachusetts, and having its principal place of business at 77 Massachusetts Avenue, E32-300. Cambridge, MA 02139, is desirous of acquiring the entire right, title, and interest in and to said invention, to said application for any and all countries, to any and all Letters Patent, and to any and all Design Letters Patent of any and all countries which may be granted the con;

NOW, THEREFORE, Be It Known that for good and valuable consideration, the receip of all of which is hereby acknowledged, I(we) hereby sell, assign, and transfer unto Assignee, its successors, and assigns, the entire right, title and interest, legal and equitable, in and to said invention, to said application for any and all countries, to any and all Letters Patent, and to any and all Design Letters Patent of any and all countries which may be granted thereon; and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent and all Design Letters Patent which may be granted to said invent on to Assignee.

Dated: ///19/99	First Inventor's Signature: First Inventor's Name:	Andrew Scott Lawing
Dated:	Second Inventor's Signature: Second Inventor's Name:	Herbert H. Sawin
Dated:	Third Inventor's Signature: Third Inventor's Name:	Jane Chang
Dated:	Second Inventor's Signature: Second Inventor's Name:	Zhe Zhang
Dated:	Third Inventor's Signature: Third Inventor's Name:	HanXu

443/97753 PATENT

REEL: 010498 FRAME: 0233

#### ASSIGNMENT

WHEREAS, we, Andrew Scott Lawing; Herbert H. Sawin; Jane Chang; Zhe Zhang; Han Xu residing at 8809 S. Pointe Pkwy E., #2167, Phoenix, AZ 85044; 15 Larkin Road, Chestnot Hill, MA 02147; 25 Hickory Place, Apt. #H27, Chatham, NJ 07928; 170 Giotto, Irvine, CA 92614; 19 Rawson Avenue, Lexington, MA 02173 have invented and own the entire United States right, title and interest in an invention for:

#### METALS REMOVABLE PROCESS

disclosed in my application for United States Letter Patent filed:

- concurrently herewith
- on October 1, 1998 and assigned Serial No. 09/051.686; and

1 hereby authorize and request any atomey of Vidas, Arreit & Steinkraus, P.A., Suite 2000, 6109 Blue Circle Drive, Minnetonka, MN 55343-9131, to insert the filing date and application number of said application above when known.

WHEREAS, Massachusetts Institute of Technology ("Assignee"), a corporation organized and existing under and by virtue of the laws of the State of Massachusetts, and having its principal place of business at 77 Massachusetts Ayenus E32-360. Cambridge, MA 02139, is desirous of acquiring the entire right, title, and interest in and to said invention, to said application for any and all countries, to any and all Letters Patent, and to any and all Design Letters Patent of any and all countries which may be granted thereon;

NOW, THEREFORE, Be It Known that for good and valuable consideration, the receipt of all of which is hereby acknowledged, I(we) hereby sell, assign, and transfer unto Assignee, its successors, and assigns, the entire right, title and interest, legal and equitable, in and to said invention, to said application for any and all countries, to any end all Letters Patent, and to any and all Design Letters Patent of any and all countries which may be granted thereon; and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent and all Design Letters Patent which may be granted to said invention to Assignee.

Dated:	First Inventor's Signature: First Inventor's Name:	Andrew Scott Lawing
Dated: ///19/99	Second Inventor's Signature: Second Inventor's Name:	Herbert H. Sawin
Dated:	Third Inventor's Signature; Third inventor's Name:	Jame Chang
Dated:	Second Inventor's Signature; Second Inventor's Name;	Zhe Zhang
Dated:	Third Inventor's Signature: Third Inventor's Name:	HanXu

PATENT REEL: 010498 FRAME: 0234

#### ASSIGNMENT

WHEREAS, we, Andrew Scott Lawing; Herbert H. Sawin; Jane Chang; Zhe Zhang; Han Xu residing at 8809 S. Pointe Pkwy E., #2167, Phoenix, AZ 85044; 15 Larkin Road, Chestnut Hill, MA 02147; 25 Hickory Place, Apt. #H27, Chatham, NJ 07928; 170 Giotto, Irvine, CA 92614; 19 Rawson Avenue, Lexington, MA 02173 have invented and own the entire United States right, title and interest in an invention for:

| 10600 Wilshire Blvd. #326, Los Argeles, CA 90024 GPC | METALS REMOVABLE PROCESS

disclosed in my application for United States Letter Patent filed:

- concurrently herewith
- on October 1, 1998 and assigned Serial No. 09/051.686; and

I hereby authorize and request any attorney of Vidas, Arrett & Steinkraus, P.A., Suite 2000, 6109 Blue Circle Drive, Minnetonka, MN 55343-9131, to insert the filing date and application number of said application above when known.

WHEREAS, Massachusetts Institute of Technology ("Assignee"), a corporation organized and existing under and by virtue of the laws of the State of Massachusetts, and having its principal place of business at 77 Massachusetts Avenue, E32-300, Cambridge, MA 02139, is desirous of acquiring the entire right, title, and interest in and to said invention, to said application for any and all countries, to any and all Letters Patent, and to any and all Design Letters Patent of any and all countries which may be granted thereon;

NOW, THEREFORE, Be It Known that for good and valuable consideration, the receipt of all of which is hereby acknowledged, I(we) hereby sell, assign, and transfer unto Assignce, its successors, and assigns, the entire right, title and interest, legal and equitable, in and to said invention, to said application for any and all countries, to any and all Letters Patent, and to any and all Design Letters Patent of any and all countries which may be granted thereon; and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent and all Design Letters Patent which may be granted to said invention to Assignee.

Dated:		First Inventor's Signature: First Inventor's Name:	Audrew Scott Lawing
Dated:	N 23	Second Inventor's Signature: Second Inventor's Name:	Herbert H. Sawin
Dated:	Nov. 29, 1989	Third Inventor's Signature: Third Inventor's Name:	Jane P. Chang ga
Dated:	erroria. Mai erroria	Second Inventor's Signature: Second Inventor's Name:	Zhe Zhang
Dated:		Third Inventor's Signature: Third Inventor's Name:	HanXu

HOV SO 99 OF LIALTY Jane P. Chang

REEL: 010498 FRAME: 0235

#### ASSIGNMENT

WHEREAS, we, Andrew Scott Lawing; Herbert H. Sawin; Jane Chang; Zhe Zhang; Han Xu residing at 8809 S. Pointe Pkwy E., #2167, Phoenix, AZ 85044; IS Larkin Road, Chestaut Hill, MA 02147; 25 Hickory Place, Apt. #H27, Chatham, NJ 07928; 170 Giotto, Irvine, CA 92614; 19 Rawson Avenue, Lexington, MA 02173 have invented and own the entire United States right, title and interest in an invention for:

#### METALS REMOVABLE PROCESS

- □ concurrently herewith
- on October 1, 1998 and assigned Scrial No. 09/051.686; and

I hereby authorize and request any attorney of Vidas, Arrett & Steinkraus, P.A., Suite 2000, 6109 Blue Circle Drive, Minnetonka, MN 55343-9131, to insert the filing date and application number of said application above when known.

WHEREAS, Massachusetts Institute of Technology ("Assignee"), a corporation organized and existing under and by virtue of the laws of the State of Massachusetts, and having its principal place of business at 77 Massachusetts Avenue. E32-300. Cambridge, MA 02139, is desirous of acquiring the entire right, title, and interest in and to said invention, to said application for any and all countries, to any and all Letters Patent, and to any and all Design Letters Patent of any and all countries which may be granted thereon;

NOW, THEREFORE, Be It Known that for good and valuable consideration, the receipt of all of which is hereby acknowledged, I(we) hereby sell, assign, and transfer unto Assignee, its successors, and assigns, the entire right, title and interest, legal and equitable, in and to said invention, to said application for any and all countries, to any and all Letters Patent, and to any and all Design Letters Patent of any and all countries which may be granted thereon; and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent and all Design Letters Patent which may be granted to said invention to Assignee.

Dated:		First Inventor's Signature: First Inventor's Name:	Andrew Scott Lawing
Dated:		Second Inventor's Signature: Second Inventor's Name:	Herbert H. Sawin
Dated:		Third Inventor's Signature: Third Inventor's Name:	Jane Chang
Dated:	12/07/99	Second Inventor's Signature: Second Inventor's Name:	Zhe Zhang
Datod:		Third Inventor's Signature: Third Inventor's Name:	НадХи

TOTAL P.01

#### ASSIGNMENT

WHEREAS, we, Andrew Scott Lawing; Herbert H. Sawin; Jane Chang; Zhe Zhang; Han Xu residing at 8809 S. Pointe Pkwy E., #2167, Phoenix, AZ 85044; 15 Larkin Road, Chestnut Hill, MA 02147; 25 Hickory Place, Apt. #H27, Chatham, NJ 07928; 170 Giotto, Irvine, CA 92614; 19 Rawson Avenue, Lexington, MA 02173 have invented and own the entire United States right, title and interest in an invention for:

#### METALS REMOVABLE PROCESS

disclosed in my application for United States Letter Patent filed:

concurrently herewith

**RECORDED: 12/14/1999** 

on October 1, 1998 and assigned Serial No. 09/051,686; and

I hereby authorize and request any attorney of Vidas, Arrett & Steinkraus, P.A., Suite 2000, 6109 Blue Circle Drive, Minnetonka, MN 55343-9131, to insert the filing date and application number of said application above when known.

WHEREAS, Massachusetts Institute of Technology ("Assignee"), a corporation organized and existing under and by virtue of the laws of the State of Massachusetts, and having its principal place of business at 77 Massachusetts Avenue, E32-300, Cambridge, MA 02139, is desirous of acquiring the entire right, title, and interest in and to said invention, to said application for any and all countries, to any and all Letters Patent, and to any and all Design Letters Patent of any and all countries which may be granted thereon,

NOW, THEREFORE, Be It Known that for good and valuable consideration, the receipt of all of which is hereby acknowledged, I(we) hereby sell, assign, and transfer unto Assignee, its successors, and assigns, the entire right, title and interest, legal and equitable, in and to said invention, to said application for any and all countries, to any and all Letters Patent, and to any and all Design Letters Patent of any and all countries which may be granted thereon; and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent and all Design Letters Patent which may be granted to said invention to Assignee.

Dated:	First Inventor's Signature: First Inventor's Name:	Andrew Scott Lawing
Dated:	Second Inventor's Signature: Second Inventor's Name:	Herbert H. Sawin
Dated:	Third Inventor's Signature: Third Inventor's Name:	Jane Chang
Dated:	Second Inventor's Signature: Second Inventor's Name:	Zhe Zhang
Dated: 11/19/99	Third Inventor's Signature: 4 Third Inventor's Name:	Han XI

TOTAL P.02