FORM PTO-1595

RECC

Docket No. [02-338-C]
U.S. DEPARTMENT OF COMMERCE

٠	DEFACTMENT	O.	COMMIN	LICL
	Patent and	Tra	demark	Office

102581227				
To The Honorable Commissioner of Patents and Trademarks: Please re-	cord the attached original documents or copy thereof.			
1. Name of conveying partly(ies):	Name and address of receiving party(ies)			
Chad A. Mirkin	Name: Northwestern University			
Yunwei Cao				
Rongchao Jin	Address: 633 Clark Street			
Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No	Evanston, IL 60208			
	None			
3. Nature of conveyance:	Name:			
☑ Assignment ☐ Merger				
Change of Name	Address:			
☐ Security Agreement ☐ Change of Name				
Other				
Execution Date: August 13, 2002 and August 14, 2002				
Execution Date. August 13, 2002 and August 14, 2002	Additional name(s) & address(es) attached? □Yes ☒ No			
4. Application number(s) or patent number(s):				
If this document is being filed together with a new application, the execution date of the application is:				
A. Patent Application No.(s) Filing Date	B. Patent No.(s)			
10/431,341 May 7, 2003	Z 7			
	FI 20			
	B. Patent No.(s)  attached? □ Yes ☒ No  6. Total number of applications and patents involved: ☐			
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved.			
	6. Total number of applications and patents involved:			
Name: Emily Miao	37			
Registration No.: 35,285	7. Total Fee (37 CFR 3.41)\$40.00			
Acquaration 14011 20,200	-			
Company Name: McDonnell, Boehnen, Hulbert & Berghoff	⊠ Enclosed			
Street Address: 300 South Wacker Drive – 32 <sup>nd</sup> Floor	☐ Authorized to be charged to deposit account			
Street Address. 300 South Wacker Drive - 32 1 1001	-			
City: Chicago State: Illinois	8. Deposit account number:			
7ID (0/0/	13-2490			
Country: U.S.A. ZIP: 60606	13-2470			
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.	$M_{AL}$			
Emily Miao	Date: O 17/03			
Printed Name of Person Signing Signature				
Total number of pages including cover sheet, attachments, and document:  Mail documents to be recorded with required cover sheet information to:				
Mail Stop Assignment Recordation Services				
Director of the United States Patent and Trademark Office				
0/21/2003 LINUELLER 00000314 10431341 P.O. Box 1450				
1	VA 22313-1450			

**PATENT REEL: 014600 FRAME: 0077** 

## ASSIGNMENT

Serial No.: 10/431,341

Case No.:

02-338-C Chad A. Mirkin, Yunwei Cao, Rongchao Jin

Inventors:

Date of Execution

Filing Date: May 7, 2003 of Application:

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

> Northwestern University 633 Clark Street Evanston, Illinois 60208 a corporation of the State of Illinois

its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

## Nanoparticle Probes with Raman Spectroscopic Fingerprints for Analyte Detection

and identified as:

## Case No. 02-338-C

in the offices of McDonnell Boehnen Hulbert & Berghoff and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

- 1 -

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

WITNESS my hand and seal this 17 day of Ayust, 2003.

Chad A. Mirkin

'll appl

State of Illinois

County of Cook

The foregoing instrument was acknowledged before me this Ht day of

Mugnet, 2003 by Chad A. Mirkin.

OTARY PUBL

OFFICIAL SEAL
JOANN CONTRERAS
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 4-9-2006

WITNESS my hand and seal this 15 day of August 2003.

Rongchao Jin

State of TUMIS

County of Cook

The foregoing instrument was acknowledged before me this <u>\</u> day of

August, 2003 by Rongchao Jin.

NOTARY PUBLIC

OFFICIAL SEAL SUZANNE F. AUBURN NUTARY PUBLIC, STATE OF ILLINOIS MY COMPESSION EXPIRES 5-16-2006 WITNESS my hand and seal this \_\_\_\_\_\_ day of \_\_\_\_\_\_\_, 2003.

State of Flanda

County of Wachua

Yunwei Cao Floridu Driva hicence Jerraray

The foregoing instrument was acknowledged before me this  $\cancel{\mathbb{Z}^{+n}}$  day of

Curyust, 2003 by Yunwei Cao.

JACKIE KLEIN Notary Public, State of Florida My comm. exp. Sept. 19, 2006 Comm. No. DD 146638