

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3402152

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ROBERT ELGHANIAN	01/30/2015
ROBERT L. LETSINGER	03/22/2015
CHAD A. MIRKIN	08/19/2013
ROBERT C. MUCIC	09/24/2013
JAMES J. STORHOFF	09/12/2013
THOMAS A. TATON	03/26/2015
RECEIVING PARTY DATA	
Name:	NORTHWESTERN UNIVERSITY
Street Address:	633 CLARK STREET
City:	EVANSTON
State/Country:	ILLINOIS
Postal Code:	60208
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	10410324
CORRESPONDENCE DATA	
Fax Number:	(312)474-0448
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	3124746300
Email:	wsalgado@marshallip.com
Correspondent Name:	WALESKA SALGADO
Address Line 1:	233 SOUTH WACKER DRIVE
Address Line 2:	SUITE 6300
Address Line 4:	CHICAGO, ILLINOIS 60606
ATTORNEY DOCKET NUMBER:	10/410324 JOINTORG 1
NAME OF SUBMITTER:	SHELLEY DANEK
SIGNATURE:	/Shelley Danek/
DATE SIGNED:	06/18/2015

Total Attachments: 21

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JOINT OWNERSHIP & ASSIGNMENT AGREEMENT

This joint ownership and assignment agreement ("Assignment") is by and among Nanosphere, Inc., an Delaware Corporation and successor in interest to Nanosphere LLC, 4088 Commercial Avenue, Northbrook, Illinois 60062 ("Nanosphere"), each Inventor (defined below) with respect to the Joint Patent Rights she or he invented, and Northwestern University, Rebecca Crown Center 2-223, 633 Clark Street, Evanston, Illinois 60208-1108 ("Northwestern").

For good and valuable consideration sufficiently received, the parties hereby agree as follows:

"Assigned Rights" means: (a) New Matter; (b) the right of priority, including to claim priority benefit of or to the New Matter and request that patents of the New Matter issue to and in the name of Northwestern University; and (c) the right to sue for and retain past, present, and future damages and to seek other remedies legal and equitable that an owner of the New Matter may have been, is or may be able to assert regarding the Joint Patent Rights, including for infringement before, on and/or after the date of execution of this assignment.

"Inventor" means each individual identified in Exhibit 1, incorporated herein by reference.

"Joint Patent Rights" means: (i) patents and patent applications listed on the attached Exhibit 2, incorporated herein by reference; (ii) U.S., PCT and foreign applications based thereon unless stated otherwise in Exhibit 2, including divisionals, continuations and continuations-in-part thereof; (iii) patents issuing on any of the foregoing; as well as (iv) reexaminations, reissues, extensions of and supplementary protection on any of the foregoing; but in each case in (ii)-(iv) only to the extent of the claims that are sufficiently supported for purposes of 35 U.S.C. §112 by the disclosure in a patent or patent application listed in Exhibit 2.

"New Matter" means: (1) the subject matter of the Joint Patent Rights that is not disclosed and enabled solely by the specification of PCT/US97/012783; (2) U.S., PCT and foreign applications based thereon unless stated otherwise in Exhibit 2, including divisionals, continuations and continuations-in-part thereof; (3) patents issuing on any of the foregoing; as well as (4) reexaminations, reissues, extensions of and supplementary protection on any of the foregoing; but in each case in (2)-(4) only to the extent of the claims that are sufficiently supported for purposes of 35 U.S.C. §112 by the disclosure in a patent or patent application listed in Exhibit 2 that is not disclosed and enabled solely by the specification of PCT/US97/012783.

The parties hereby agree that Nanosphere and Northwestern are joint owners of all right, title and interest in and to the Joint Patent Rights effective *nunc pro tunc* as of the first date of the conception of the New Matter; Nanosphere has an ownership interest in the Joint Patent Rights from the assignment of rights from the inventors of PCT/US97/012783 dated January 8, 1999 (such assignment does not include the New Matter); Northwestern has an equal and undivided ownership interest in the Joint Patent Rights from this Assignment of the Assigned Rights; and each Inventor and Nanosphere hereby irrevocably sell, assign and transfer to Northwestern all its right, title and interest, both legal and equitable, throughout the world, in and to the Assigned Rights.

The parties execute and deliver this Assignment by their duly authorized signatory who each party represents and warrants has the sufficient authority to make this a binding agreement by signing below. This Assignment is binding on and inures to the benefit of the parties and their legal representatives, administrators, heirs, successors and assigns. No amendment or modification to this Assignment shall be effective unless in writing and signed Nanosphere, Northwestern and the Inventors of the respective Joint Patent Rights. No waiver shall be effective unless signed by the party waiving its rights.

Each party had an opportunity to be represented by counsel of its choosing and as such this Assignment shall not be construed against any drafter. If any term of this Assignment is determined to be invalid or unenforceable under any controlling body of law, such invalidity or non-enforceability shall not in any way affect the

validity or enforceability of the remaining terms or the validity or enforceability of such term in any jurisdiction where valid and enforceable. Any invalid or unenforceable provision will be reformed by the parties to effectuate their intent as evidenced on the Effective Date, provided that if the invalid or unenforceable provision in a given jurisdiction pertains to the retroactive nature of the assignment, then the parties hereby agree that the effective date in such jurisdiction shall be the date last signed below for the parties applicable for such specific Assigned Rights.

NANOSPHERE, INC.

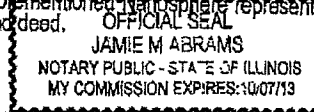
[Signature]
Roger Moody, VP Finance, Treasurer and Chief Financial Officer

6/19/13
Date

STATE OF Illinois)
COUNTY OF Cook) SS.

On this 19 day of June, 2013, there appeared before me the aforementioned Nanosphere representative, known to me, who stated they signed this Assignment as a voluntary act and deed.

[Signature]
Notary



NORTHWESTERN UNIVERSITY

[Signature]
Alicia Löffler, Executive Director and Associate Vice President

8/13/13
Date

STATE OF ILLINOIS)
COUNTY OF COOK) SS.

On this 13 day of AUGUST, 2013, there appeared before me the aforementioned Northwestern representative, known to me, who stated they signed this Assignment as a voluntary act and deed.

[Signature]
Notary



[Signature]
Chad A. Mirkin

8/19/13
Date

STATE OF Illinois)
COUNTY OF Cook) SS.

On this 19th day of August, 2013, there appeared before me the aforementioned person, known to me, who stated they signed this Assignment as a voluntary act and deed.

[Signature]
Notary



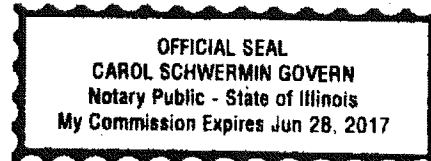
[Signature]
Robert Elghanian

01/30/15
Date

STATE OF ILLINOIS)
COUNTY OF COOK) SS.

On this 30 day of January, 2015, there appeared before me the aforementioned individual, known to me, who stated they signed this Assignment as a voluntary act and deed.

[Signature]
Notary



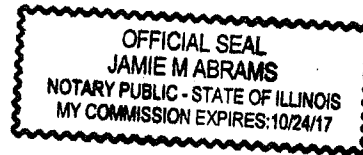
Viswanadham Garimella
Viswanadham Garimella

12/02/2013
Date

STATE OF Illinois)
COUNTY OF Cook) SS.

On this 2nd day of December 2013, there appeared before me the aforementioned individual, known to me, who stated they signed this Assignment as a voluntary act and deed.

Jamie M Abrams
Notary



Inventor Name: Robert L. Letsinger (Deceased)

This assignment was signed by the estate and the heirs of Robert L. Letsinger:

Reed Letsinger 3/22/2015
Reed Letsinger Date
56 Reed Lane
Larkspur, CA 94939

Address

Sue Letsinger 2/22/2015
Sue Letsinger Date

24815-138th Pl. SW
Vashon, WA 98070
Address

02/16/2015
Date

[Signature]
Date

STATE OF MICHIGAN, SS.
COUNTY OF WILSON

On this 16th day of February, 2015, there appeared before me the aforementioned individual, known to me, who
signed the foregoing as a voluntary act and deed.

[Signature]
Notary

State of Michigan, County of Saginaw
Notary Public
Acting in the County of Michigan
My Commission Expires 7/19/2021

Gang Lu

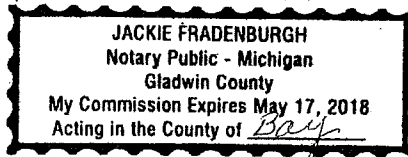
Date

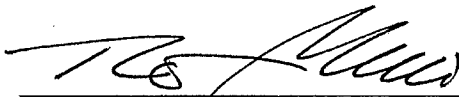
09/18/13

STATE OF MICHIGAN
COUNTY OF Bay) SS.

On this 18th day of Sept., 2013, there appeared before me the aforementioned individual, known to me, who stated they signed this Assignment as a voluntary act and deed.

Jackie Fradenburgh
Notary





Robert C. Mucic

09/24/13

Date

STATE OF California)
COUNTY OF Los Angeles) SS.

On this 24 day of Sept, 2013, there appeared before me the aforementioned individual, known to me, who stated they signed this Assignment as a voluntary act and deed.

* See Attachment
Notary

CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

State of California Joint Ownership + Assignment Agreement
County of Los Angeles
On 09/24/2013 before me, Micah Holland Notary Public
(Here insert name and title of the officer)
personally appeared Robert C. Muciz

who proved to me on the basis of satisfactory evidence to be the person ~~or~~ whose name ~~or~~ s are subscribed to the within instrument and acknowledged to me that ~~he~~ she / they executed the same in ~~his~~ her / their authorized capacity ~~(s)~~, and that by ~~his~~ her / their signature ~~s~~ on the instrument the person ~~s~~, or the entity upon behalf of which the person ~~s~~ acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

[Signature]
Signature of Notary Public

(Notary Seal)



ADDITIONAL OPTIONAL INFORMATION

DESCRIPTION OF THE ATTACHED DOCUMENT

(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages _____ Document Date _____

(Additional information)

CAPACITY CLAIMED BY THE SIGNER

- ☐ Individual (s)
☐ Corporate Officer

(Title)

- ☐ Partner(s)
☐ Attorney-in-Fact
☐ Other _____

INSTRUCTIONS FOR COMPLETING THIS FORM

Any acknowledgment completed in California must contain verbiage exactly as appears above in the notary section or a separate acknowledgment form must be properly completed and attached to that document. The only exception is if a document is to be recorded outside of California. In such instances, any alternative acknowledgment verbiage as may be printed on such a document so long as the verbiage does not require the notary to do something that is illegal for a notary in California (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required.

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of the document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he~~/~~she~~/~~they~~, ~~is~~/~~are~~) or circling the correct forms. Failure to correctly indicate this information may lead to reject of the document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
 - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
 - ❖ Indicate title or type of attached document, number of pages and date.
 - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document.

Park So Jung
So Jung Park

Dec 12/2013
Date

STATE OF _____)
COUNTY OF South Korea) SS.

On this 12 day of Dec, 2013, there appeared before me the aforementioned individual, known to me, who stated they signed this Assignment as a voluntary act and deed.

Notary

2013

Myungjoo Seo.

James J. Storhoff

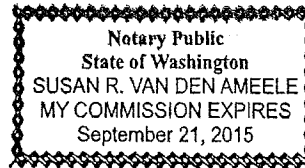
Date

12-Sep-2013

STATE OF Washington)
) SS.
COUNTY OF King)

On this 12 day of September 2013, there appeared before me the aforementioned individual, known to me, who stated they signed this Assignment as a voluntary act and deed.

Notary



Thomas A. Taton

Date _____

COUNTY OF Ramsey 2015

Notary

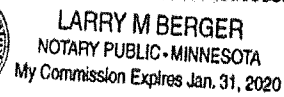


EXHIBIT 1

Chad A. Mirkin
Robert Elghanian
Viswanadham Garimella
Robert L. Letsinger
Zhi Li
Gang Lu
Robert C. Mucic
So-Jung Park
James J. Storhoff
Thomas Andrew Taton

EXHIBIT 2
JOINT PATENT RIGHTS

Case Number	NU#	Title	Inventors	Country	App/Pub No.	Patent No.
00-713-B1	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian	USA	09/923,625	6,773,884
00-713-C	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian	USA	09/344,667	6,361,944 ¹
00-713-I	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/603,830	6,506,564
00-713-I-1	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/961,949	6,582,921
00-713-I-2	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/957,318	6,759,199
00-713-I-3	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/957,313	6,645,721
00-713-I-4	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/966,491	6,610,491

¹ This assignment does not confer to Assignee any rights in or to U.S. Patent No. 6,417,340, which is a divisional of U.S. Patent No. 6,361,944, or to any U.S., PCT or foreign applications based on the '340 patent, any divisionals, continuations, or continuations-in-part based on or claiming priority to the '340 patent, any patents issuing thereon, or any reexaminations, reissues, extensions of or any supplementary protection on any of the foregoing.

Case Number	NU#	Title	Inventors	Country	App/Pub No.	Patent No.
00-713-I-5	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/966,312	6,673,548
00-713-I-6	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/967,409	6,740,491
00-713-I-8	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Robert Elghanian Robert L. Letsinger Chad A. Mirkin Robert C. Mucic James J. Storhoff Thomas A. Taton	USA	09/974,007	7,259,252
00-713-I-12	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/975,376	Abandoned
00-713-I-15	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/975,059	6,828,432
00-713-I-16	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Robert Elghanian Robert L. Letsinger Chad A. Mirkin Robert C. Mucic James J. Storhoff Thomas A. Taton	USA	09/976,601	6,903,207
00-713-I-20	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/976,577	6,720,147
00-713-I-21	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/976,618	6,812,334

Case Number	NU#	Title	Inventors	Country	App/Pub No.	Patent No.
00-713-I-22	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	09/981,344	6,777,186
00-713-I-26	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Robert Elghanian Robert L. Letsinger Chad A. Mirkin Robert C. Mucic James J. Storhoff Thomas A. Taton	USA	10/410,324	6,962,786
00-713-I-27	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	USA	11/702,002	8,323,888
00-713-L	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian	USA	09/693,005	6,495,324
00-713-M	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian	USA	09/693,352	6,417,340
00-713-N	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	Australia	56378/00	784040
00-713-O	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	Canada	2,376,623	CA2376623
00-713-P	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	Japan	2001-0506866	Pending
00-713-Q	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	EPC	00941713.0 EP1198591	EP1198591

Case Number	NU#	Title	Inventors	Country	App/Pub No.	Patent No.
00-713-Q-FR	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	France	00941713.0	FR1198591
00-713-Q-DE	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	Germany	00941713.0	DE1198591
00-713-Q-GB	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton	Great Britain	00941713.0	GB1198591
00-715-A	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Viswanadham Garimella Zhi Li	USA	09/760,500	6,767,702
00-715-B	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Robert L. Letsinger Zhi Li Chad A. Mirkin	USA	10/716,829	7,250,499
00-715-C	1969-026	Method of Attaching Oligonucleotides to Nanoparticles and Products Produced Thereby	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Zhi Li Viswanadham Garimella	PCT	US01/01190	Expired
00-715-D	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefor	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic Zhi Li Robert Elghanian Thomas A. Taton James J. Storhoff	Australia	32795/01	774593 Abandoned

Case Number	NU#	Title	Inventors	Country	App/Pub No.	Patent No.
00-715-E	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefor	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Zhi Li Viswanadham Garimella	Canada	2,396,113	2396113
00-715-F	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefor	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Zhi Li Viswanadham Garimella	EPC	2001904855.2 EP1294930	EP1294930
00-715-F-FR	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefor	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Zhi Li Viswanadham Garimella	France	1904855.2	FR1294930
00-715-F-DE	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefor	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Zhi Li Viswanadham Garimella	Germany	1904855.2	DE1294930
00-715-F-GB	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefor	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Zhi Li Viswanadham Garimella	Great Britain	1904855.2	GB1294930
00-715-G	1969-026	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefor	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Zhi Li Viswanadham Garimella	Japan	2001-0551239	Abandoned

Case Number	NU#	Title	Inventors	Country	App/Pub No.	Patent No.
00-1085-A	20019	Nanoparticles having Oligonucleotides Attached Thereto and Uses Therefore	Chad A. Mirkin Robert L. Letsinger So-Jung Park	USA	09/820,279	6,750,016
00-1085-B	20019	Method and Materials for Assaying Biological Materials	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton So-Jung Park Zhi Li Viswanadham Garimella	PCT	US01/010071	Expired
00-1085-C	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton So-Jung Park Zhi Li Viswanadham Garimella	Australia	2001255203	Abandoned
00-1085-D	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton So-Jung Park Zhi Li Viswanadham Garimella	Canada	2402955	2402955
00-1085-E	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton So-Jung Park Zhi Li Viswanadham Garimella	EPC	2001928332.4	EP1301625
00-1085-E-FR	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton So-Jung Park Zhi Li Viswanadham Garimella	France	1928332.4	FR1301625

Case Number	NU#	Title	Inventors	Country	App/Pub No.	Patent No.
00-1085-E-DE	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton So-Jung Park Zhi Li Viswanadham Garimella	Germany	1928332.4	DE1301625
00-1085-E-GB	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton So-Jung Park Zhi Li Viswanadham Garimella	Great Britain	1928332.4	GB1301625
00-1085-F	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton So-Jung Park Zhi Li Viswanadham Garimella	Japan	2001-0570836	Abandoned
00-1085-G	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Robert L. Letsinger Chad A. Mirkin So-Jung Park	USA	10/640,618	7,208,587
00-1085-H	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin James J. Storhoff Robert Elghanian Zhi Li Robert L. Letsinger So-Jung Park Thomas A. Taton Robert C. Mucic	Australia	2006200261	Abandoned
00-1085-H2	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin James J. Storhoff Robert Elghanian Zhi Li Robert L. Letsinger So-Jung Park Thomas A. Taton Robert C. Mucic	Australia	2010202492	Abandoned

Case Number	NU#	Title	Inventors	Country	App/Pub No.	Patent No.
00-1085-I	20019	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin James J. Storhoff Robert Elghanian Zhi Li Robert L. Letsinger So-Jung Park Thomas A. Taton Robert C. Mucic	Japan	2006-0195313	Abandoned
00-1272-C	20095	Nanoparticles having Oligonucleotides Attached Thereto and Uses Therefore	Robert Elghanian Viswanadham Garimella Robert L. Letsinger Zhi Li Gang Lu Chad A. Mirkin Robert C. Mucic So-Jung Park James J. Storhoff Thomas A. Taton	USA	10/008,978	6,984,491
00-1272-D	20095	Multicolor Labeling of Oligonucleotide Arrays Via Size-Selective Scattering of Nanoparticle Probes	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Viswanadham Garimella Zhi Li So-Jung Park	PCT	US01/46418	Expired
00-1272-E	20095	Nanoparticles Having Oligonucleotides Attached Thereto And Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Viswanadham Garimella Zhi Li So-Jung Park	EPC	2001990826.8	Abandoned
00-1272-F	20095	Nanoparticles Having Oligonucleotide Attached Thereto and Uses Therefore	Chad A. Mirkin Robert L. Letsinger Robert C. Mucic James J. Storhoff Robert Elghanian Thomas A. Taton Viswanadham Garimella Zhi Li So-Jung Park Gang Lu	USA	11/050,983	Abandoned