

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3548285

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
LAURA M. ENSIGN	08/24/2012
SAMUEL K. LAI	09/08/2012
TAO YU	08/15/2012
JUSTIN HANES	08/21/2012
MING YANG	08/15/2012
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE JOHNS HOPKINS UNIVERSITY
<b>Street Address:</b>	100 N. CHARLES STREET, 5TH FLOOR
<b>Internal Address:</b>	LICENSING & TECHNOLOGY DEVELOPMENT
<b>City:</b>	BALTIMORE
<b>State/Country:</b>	MARYLAND
<b>Postal Code:</b>	21201
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14731972
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<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>	
<b>Email:</b>	christopher.lyle@klgates.com
<b>Correspondent Name:</b>	K&L GATES LLP
<b>Address Line 1:</b>	1 PARK PLAZA
<b>Address Line 2:</b>	TWELFTH FLOOR
<b>Address Line 4:</b>	IRVINE, CALIFORNIA 92614
<b>ATTORNEY DOCKET NUMBER:</b>	1959057.00073
<b>NAME OF SUBMITTER:</b>	MICHELLE GLASKY BERGMAN
<b>SIGNATURE:</b>	/Michelle Glasky Bergman/
<b>DATE SIGNED:</b>	09/29/2015
<b>Total Attachments: 6</b>	

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## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

1. Sell, assign and transfer to The Johns Hopkins University, a University having a place of business at 100 N. Charles Street, 5th Floor; Licensing & Technology Development; Baltimore, Maryland 21201, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on May 3, 2012 under No. 61/642,227, bearing Attorney Docket No. K0560.70006US00, and entitled NANOCRYSTALS, COMPOSITIONS, AND METHODS THAT AID PARTICLE TRANSPORT IN MUCUS, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea;
2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation;
5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

8/24/12  
Date

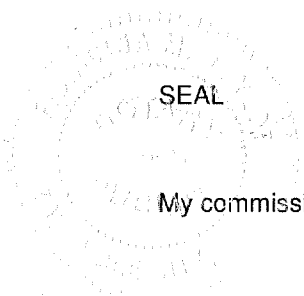
Laura M Ensign  
Inventor: Laura M. Ensign

Address: 320 Stevenson Lane, Apt. A4  
Towson, Maryland 21204

Citizenship: US

STATE/Commonwealth of Maryland  
COUNTY OF Baltimore:

On this 24<sup>th</sup> day of August, 2012, before me, the undersigned notary public, personally appeared Laura M. Ensign, proved to me through satisfactory evidence of identification, which were Maryland Drivers License, to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.



SEAL

Francina M Taylor  
Notary Public

My commission expires: May 5, 2014

**FRANCINA M. TAYLOR  
NOTARY PUBLIC  
BALTIMORE CITY  
MARYLAND  
MY COMMISSION EXPIRES MAY 5, 2014**

Date 9/8/2012

Inventor: Samuel K. Lai  
Address: 106 Oak Spring Court  
Carrboro, North Carolina 27510  
Citizenship: Canada

STATE/Commonwealth of NC  
COUNTY OF Orange:

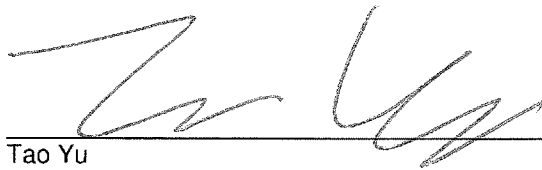
On this 8<sup>th</sup> day of September, 2012, before me, the undersigned notary public, personally appeared Samuel K. Lai, proved to me through satisfactory evidence of identification, which were NC Driver license 36763668, to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

**LESLIE T PERSON**  
NOTARY PUBLIC  
DURHAM COUNTY  
NORTH CAROLINA  
MY COMMISSION EXPIRES MAY 29, 2016

Leslie T Person  
Notary Public

My commission expires: May 29, 2016

Date 08/15/2012



Inventor: Tao Yu  
Address: Smith Building 6001 Bay H1  
400 N Broadway  
Baltimore, Maryland 21231  
Citizenship: People's Republic of China

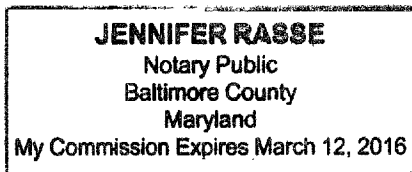
STATE/Commonwealth of Maryland  
COUNTY OF Baltimore:

On this 15<sup>th</sup> day of August, 2012, before me, the undersigned notary public, personally appeared Tao Yu, proved to me through satisfactory evidence of identification, which were MD DL, to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

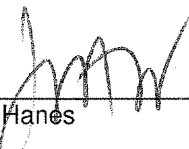
SEAL

  
Notary Public

My commission expires: March 12, 2016

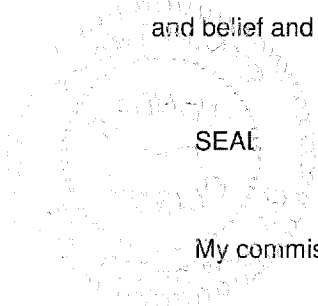


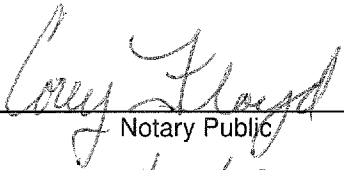
Date 8-21-12

Inventor:   
Justin Hanes  
Address: 6306 Pinehurst Way  
Baltimore, Maryland 21212  
Citizenship: US

STATE/Commonwealth of MARYLAND  
COUNTY OF Baltimore:

On this 20 day of August, 2012, before me, the undersigned notary public, personally appeared Justin Hanes, proved to me through satisfactory evidence of identification, which were Driver License, to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.



  
Notary Public

My commission expires: 3/17/2013

08/15/2012  
Date

Ming Yang  
Inventor: Ming Yang  
Address: 8106 Kirkwall Ct.  
Towson, Maryland 21286  
Citizenship: People's Republic of China

STATE/Commonwealth of Maryland  
COUNTY OF Baltimore:

On this 15<sup>th</sup> day of August, 2012, before me, the undersigned notary public, personally appeared Ming Yang, proved to me through satisfactory evidence of identification, which were MD DL, to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

SEAL Jessie Rasse  
Notary Public

My commission expires: March 12, 2016

**JENNIFER RASSE**  
Notary Public  
Baltimore County  
Maryland  
My Commission Expires March 12, 2016