PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARY J. WIRTH	11/29/2012
YIMIN HUA	11/09/2012
ZHAORUI ZHANG	11/08/2012

RECEIVING PARTY DATA

Name:	Purdue Research Foundation
Street Address:	1281 Win Hentschel Blvd.
City:	West Lafayette
State/Country:	INDIANA
Postal Code:	47906

PROPERTY NUMBERS Total: 1

Property Type	Number
PCT Number:	US2012063049

CORRESPONDENCE DATA

Fax Number: 7654633486

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 7655883475
Email: otcpatent@prf.org

Correspondent Name: Purdue Research Foundation
Address Line 1: 1281 Win Hentschel Blvd.
Address Line 4: West Lafayette, INDIANA 47906

ATTORNEY DOCKET NUMBER:	65962-02

NAME OF SUBMITTER: Melissa Franks

Total Attachments: 7

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PATENT REEL: 029418 FRAME: 0713

PRF Ref No. 65962-02

ASSIGNMENT

WHEREAS, WE, MARY J. WIRTH, citizen of the United States; YIMIN HUA, citizen

of China; ZHAORUI ZHANG, citizen of China; (hereinafter "Assignors"), have made or

developed a technology identified in a disclosure to Purdue Research Foundation (PRF) and

assigned PRF reference number 65962, generally known as:

"SUBMICROMETER SILICA PARTICLES WITH HYDROPHILIC COPOLYMER

COATINGS,"

which is further described in a patent application filed in the United States Patent and Trademark

Office on November 1, 2012 and accorded Application No. PCT/US2012/063049

("Technology"); and

WHEREAS, Purdue Research Foundation, a statutory body corporate formed and

existing under the Indiana Foundation or Holding Companies Act of 1921, having a place of

business at 1281 Win Hentschel Blvd, West Lafayette, IN 47906 (hereinafter "Assignee"), is

desirous of accepting and assuming all such right, title, and interests of the Assignor.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby

acknowledged, the Assignor(s) do hereby sell, transfer, convey, assign and deliver unto the

Assignee, its successors, assigns and legal representatives, any and all intellectual property

rights, whether domestic or foreign related to the Technology, including but not limited to: all

portions, and works in progress with respect thereto and all inventions, works of authorship,

masks works, technology, information, know-how, materials and tools relating thereto or to the

development, support or maintenance thereof; all copyright, patent rights, trade secret rights,

trademark rights, mask works rights, and all other intellectual property rights and all business,

contract rights and goodwill in, incorporated or embodied in, used to develop, or related to any

of the foregoing and any registrations and applications for registrations of the foregoing

throughout the United States of America and the world and any and all other applications arising

therefrom, including any and all divisional applications, continuation applications, and

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continuation-in-part applications (but only and solely to the extent such continuation-in-part

applications are described in the priority application to which such continuation-in-part

applications claim priority and such priority is not denied), of the Technology, and any and all

patents to be issued and obtained therefore and thereon, in the United States and throughout the

world, including all reissued Patents, and extensions thereof (collectively, the "Intellectual

Property");

AND WE HEREBY agree to communicate to Assignee or its representative any facts

known to us respecting the Technology whether or not patentable, which we may conceive,

develop, make, produce or reduce to practice in whole or in part as a result of any employment,

research, or activity involving or relating to the use of Purdue University resources; and agree to

sign all lawful documents and make all rightful oaths and declarations relating to said

Technology and Intellectual Property; authorize Assignee to insert herein the date of application,

serial number, date of registration, and registration number of patents issued once known; and

agree to otherwise aid ASSIGNEE as necessary and desirable to:

1. Obtain, enforce, and maintain any issued letters patent in the United States or

throughout the world, when reasonably requested to do so by Assignee, including but not limited

to executing, acknowledging, and delivering to Assignee such written documents and

instruments as Assignee requests and giving testimony in support of Assignee's inventorship, as

may be necessary in Assignee's opinion to obtain and maintain patents in the United States of

America and throughout the world;

2. Secure or aid in securing and maintaining copyright protection in the Intellectual

Property and assist Assignee or its nominees in filing applications to register copyright in the

name of Assignee as owner in such Intellectual Property; and

3. Execute, acknowledge, and deliver to Assignee at its expense, such written

documents and instruments and do such other acts as may be necessary in the opinion of

Assignee, to vest the entire rights, title, and interests in and to the Intellectual Property to

Assignee and to confirm the complete ownership thereof by Assignee.

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AND WE HEREBY authorize ASSIGNEE to take any and all action necessary to

effectuate this Assignment, including but not limited to, the filing of the Assignment with the

U.S. Patent and Trademark Office and U.S. Copyright Office.

AND WE HEREBY authorize and request the Director of the U.S. Patent and Trademark

Office or any other proper officer or agency throughout the world to issue any and all said letters

patent to Assignee.

AND WE HEREBY warrant and covenant that we have full rights to convey the entire

right, title and interest herein assigned and that we have not executed and will not execute any

instrument or assignment in conflict herewith;

This Assignment shall be binding upon Assignor(s) and their heirs, successors, and

assigns. Should any term of this Assignment be found invalid or unenforceable, it shall not

affect the validity or enforceability of any other term of this Assignment. The laws of the State

of Indiana will govern the interpretation, validity, and effect of this Assignment, without regard

to the place of making or to the place of performance.

This Assignment is hereby made effective as of the conception date of the Technology.

[SIGNATURES ON NEXT PAGE]

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IN WITNESS WHERE ASSIGNOR:	OF, We hav	ve hereunto set our hands a	and seals.
11/29/2012 Date		MARY J. WIRTH	Aller To Francis .
County of <u>Tappicance</u> State of <u>Tappiaaa</u>)) ss: _)	
	sonally app name, who	eared <i>MARY J. WIRTH</i> , to signed and sealed the	otary Public in and for the one known and known to foregoing instrument, and
		Notary Public	Mison
(SEAL)		My commission Expires	DONNA D. WILKINSON NOTARY PUBLIC, STATE OF INDIANA NY COMMISSION EXPIRES FEBRUARY 25, 201
Con Chis day of	á, 7 s	. Mu — Incheso hus se 84	enter was a grande part (days of the constraint

Nov. 9, 2012	2)Ci_
Date	YIMIN HUA
County and State aforesaid, personally appe	7, 2012, before me a Notary Public in and for the eared YIMIN HUA, to me known and known to me to d sealed the foregoing instrument, and acknowledged
SUSAN M. HARPER Notary Public Massachusetts Commission Evotres Apr 8, 2016	Notary Public My commission Expires April 8 26/6

11/08/2012	- 7. Carl - 2. Carl
Date	ZHAORUI ZHANG
County of Benton) State of Washington) ss: _)
County and state aforesaid, personally appear	, 20 , before me a Notary Public in and for the ared <i>ZHAORUI ZHANG</i> , to me known and known to signed and scaled the foregoing instrument, and see act and deed.
Notery Public State of Washington JUDY M KIRK (SI) All By Appointment Expires Apr 21, 2015	Notary Public

ACCEPTED BY ASSIGNEE:

<u>Desember 3, 2012</u>

Date

By; _________

Printed: Hamid R. Piroozi

Title: Legal IP Manager

Office of Technology Commercialization

Purdue Research Foundation