

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3534195

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	TATYANA DYAKONOV	09/16/2015
	DEREK BUSH	09/02/2015
	SAUJANYA GOSANGARI	09/16/2015
	CHUE HUE YANG	09/16/2015
	SHINGAI MAJURU	08/21/2015
	AQEEL FATMI	09/16/2015
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	BANNER LIFE SCIENCES	
<b>Street Address:</b>	4125 PREMIER DRIVE	
<b>City:</b>	HIGH POINT	
<b>State/Country:</b>	NORTH CAROLINA	
<b>Postal Code:</b>	27265	
<b>PROPERTY NUMBERS Total: 2</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	61790890
	Application Number:	14776325
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(919)998-5701	
<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>Phone:</b>	9199985723	
<b>Email:</b>	ahasan@brinksgilson.com	
<b>Correspondent Name:</b>	AISHA HASAN	
<b>Address Line 1:</b>	4721 EMPORER BLVD., SUITE 220	
<b>Address Line 4:</b>	DURHAM, NORTH CAROLINA 27703	
<b>ATTORNEY DOCKET NUMBER:</b>	B4700 1090US.PCT	
<b>NAME OF SUBMITTER:</b>	AISHA HASAN	
<b>SIGNATURE:</b>	/Aisha Hasan/	
<b>DATE SIGNED:</b>	09/21/2015	

**Total Attachments: 10**

source=B4700 1090\_assignment\_COMPLETE\_21-SEPT-2015#page1.tif  
source=B4700 1090\_assignment\_COMPLETE\_21-SEPT-2015#page2.tif  
source=B4700 1090\_assignment\_COMPLETE\_21-SEPT-2015#page3.tif  
source=B4700 1090\_assignment\_COMPLETE\_21-SEPT-2015#page4.tif  
source=B4700 1090\_assignment\_COMPLETE\_21-SEPT-2015#page5.tif  
source=B4700 1090\_assignment\_COMPLETE\_21-SEPT-2015#page6.tif  
source=B4700 1090\_assignment\_COMPLETE\_21-SEPT-2015#page7.tif  
source=B4700 1090\_assignment\_COMPLETE\_21-SEPT-2015#page8.tif  
source=B4700 1090\_assignment\_COMPLETE\_21-SEPT-2015#page9.tif  
source=B4700 1090\_assignment\_COMPLETE\_21-SEPT-2015#page10.tif

**WORLDWIDE INVENTION ASSIGNMENT**

WHEREAS, the undersigned (hereinafter referred to as “Assignor”) has or may have invented certain inventions and improvements disclosed in the United States patent application entitled “**SILK-BASED CAPSULES**” and designated as:

International Patent Application No. PCT/US2014/026946, filed March 14, 2014;  
the above applications claim priority from:

U.S. Provisional Patent Application No. 61/790,890, filed on March 15, 2013;  
all applications listed above being hereinafter referred to as the “Application(s)”;

WHEREAS, it is agreed that:

**BANNER LIFE SCIENCES LLC**

4125 Premier Drive

High Point, NC 27265, USA

(hereinafter referred to as the “Assignee”), is entitled to or is desirous of acquiring all right, title and interest related to the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor, by these presents, does sell, assign and transfer unto Assignee the full, exclusive and entire right, title and interest, worldwide: (i) in and to all inventions and improvements disclosed and described in the Application(s); (ii) in and to said Application(s) and any other United States national stage, provisional, non-provisional, divisional, continuation, continuation-in-part, or design patent applications based in whole or in part upon said inventions or improvements and/or claiming priority to said Application(s) (the “U.S. Applications”); (iii) in and to any Patent Cooperation Treaty applications based in whole or in part upon said inventions or improvements and/or claiming priority to said Application(s); (iv) in and to any and all applications for industrial property protection, including without limitation applications for patent, utility model, inventor’s certificate, and design, filed or which are hereafter filed in countries outside the United States (the “Foreign Applications”) and which describe in whole or in part said inventions and improvements, said Foreign Applications to be

filed and issued in the name of Assignee or its designee insofar as permitted by applicable law; (v) in and to all patents or similar protective rights in the United States or elsewhere which may be granted on the U.S. Applications and Foreign Applications and all reissues, reexaminations, and extensions thereof, any and all such patents or other protective rights to issue in the name of Assignee and for the sole use and behoof of Assignee and its successors and assigns; and (vi) in and to the right to claim any applicable foreign or domestic priority rights arising from or required for any of the aforementioned applications under the terms of any applicable conventions, treaties, statutes, or regulations.

AND, for the same consideration, Assignor agrees to (i) communicate to Assignee, its successors, legal representatives, and assigns any facts known to Assignor respecting said inventions and improvements or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may embody said inventions or improvements; (ii) sign or execute all lawful papers, applications, declarations, affidavits, assignments and rightful oaths that may be requested by Assignee during prosecution or enforcement of any rights related to the inventions and improvements; (iii) testify in any proceedings relating to said inventions or improvements or rights granted therefor; and (iv) generally do everything possible to aid Assignee and its successors, legal representatives and assigns, to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world.

Assignor covenants with Assignee, its successors, legal representatives, and assigns that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned. Assignor further agrees that Assignee, its successors, legal representatives and assigns, may insert into this Assignment any further text necessary or desirable to define the Applications to which the Assignment pertains for purposes of recordation, and also agrees that the Assignment is effective at least as early as **March 15, 2013**, the earliest priority date of the Application(s).

### INVENTOR DECLARATION

Assignor(s) intends for this Assignment to also serve as a U.S. declaration under 37 C.F.R. § 1.63(e)(1). Accordingly, with respect to the U.S. Application(s) identified herein, each undersigned inventor hereby declares that:

- (1) the above-identified Application(s) was/were made or authorized to be made by me;
- (2) I believe that I am the original inventor or an original joint inventor of a claimed invention in the Application(s);
- (3) I have reviewed and understand the contents of the above-identified Application(s), including the claims;
- (4) I acknowledge the duty to disclose any information that is material to patentability of the Applications as defined in 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which become available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application; and
- (5) I hereby acknowledge that any willful false statement made in this Assignment and Declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

IN WITNESS WHEREOF, I/we declare and acknowledge the foregoing by executing our signatures on the pages below: [counterparts are acceptable]

ASSIGNORS / DECLARANTS

  
TATYANA DYAKONOV

Date: 09/16/15

ATTESTATION

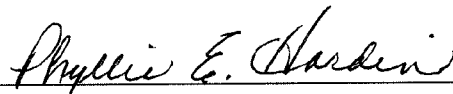
State of North Carolina

County of Randolph

I, **Phyllis Hardin**, a Notary Public for said County and State, do hereby certify that **Tatyana Dyakonov** personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16 day of September, 2015.



  
Notary Public

My commission expires 9 07/29/2019

ASSIGNORS / DECLARANTS, continued

Derek Bush  
DEREK BUSH

Date: 09-02-2015

ATTESTATION

Florida <sup>DB</sup> ~~North Carolina~~  
State of Florida County of Pinellas

I, Rochelle Gange, a Notary Public for said County and State, do hereby certify that **Derek Bush** personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 2nd day of September, 2015.



Rochelle Gange  
State of Florida  
My Commission Expires 12/10/2017  
Commission No. FF 75464

Rochelle Gange  
Notary Public

My commission expires 12.10.2017

**ASSIGNORS / DECLARANTS, continued**

*Saujanya Gosangari*  
**SAUJANYA GOSANGARI**

Date: 09/16/2015

**ATTESTATION**

State of North Carolina

County of Randolph

I, **Phyllis Hardin**, a Notary Public for said County and State, do hereby certify that **Saujanya Gosangari** personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16 day of September, 2015.



*Phyllis E. Hardin*  
Notary Public

My commission expires 07/29/2019



**ASSIGNORS / DECLARANTS, continued**

  
**CHUE HUE YANG**

Date: 9/16/2015

**ATTESTATION**

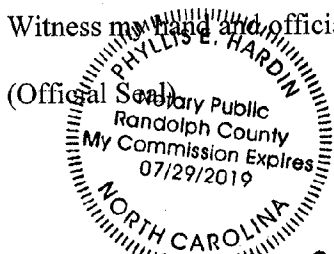
State of North Carolina

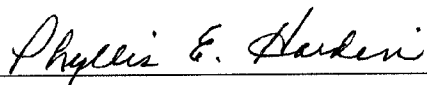
County of Randolph

I, **Phyllis Hardin**, a Notary Public for said County and State, do hereby certify that **Chue Hue Yang** personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16 day of September, 2015.

(Official Seal)



  
\_\_\_\_\_  
Notary Public

My commission expires 07/29/2019

ASSIGNORS / DECLARANTS, continued

Shingai Majuru  
SHINGAI MAJURU

Date: 08/21/2015

ATTESTATION

State of North Carolina

County of Durham

I, Thomas Whithead, a Notary Public for said County and State, do hereby certify that Shingai Majuru personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

My hand and official seal, this the 21<sup>st</sup> day of August, 2015.



Thomas Whithead  
Notary Public

My commission expires 12/07/2016

ASSIGNORS / DECLARANTS, continued

Aqeel Fatmi  
AQEEL FATMI

Date: 9/16/2015

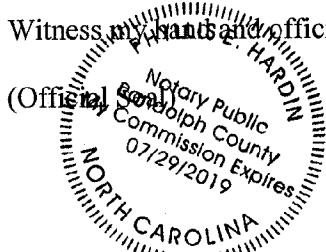
ATTESTATION

State of North Carolina

County of Randolph

I, **Phyllis Hardin**, a Notary Public for said County and State, do hereby certify that **Aqeel Fatmi** personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16 day of September, 2015.



Phyllis E. Hardin  
Notary Public

My commission expires 07/29/2019

**ACCEPTED AND ACKNOWLEDGED BY ASSIGNEE**

**BANNER LIFE SCIENCES LLC**

4125 Premier Drive  
High Point, NC 27265, USA

By (signature): *Aqeel Fatmi*

Name and Title: **AQEEL FATMI,**

Executive Vice President, Global Research and Development, BANNER LIFE SCIENCES LLC

Date: 9/16/2015

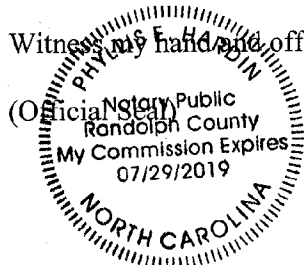
**ATTESTATION**

State of North Carolina

County of Randolph

I, **Phyllis Hardin**, a Notary Public for said County and State, do hereby certify that **Aqeel Fatmi** personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16 day of September, 2015.



*Phyllis E. Hardin*  
Notary Public

My commission expires 07/29/2019