

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

| SUBMISSION TYPE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NEW ASSIGNMENT                                      |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------|----------------|---------------------|------------|----------------|------------|-----------------|------------|---------------|------------|------------------|------------|---------------|------------|------------------|------------|----------------------------|------------|
| NATURE OF CONVEYANCE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ASSIGNMENT                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                     |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Billy Hargis</td> <td>11/28/2012</td> </tr> <tr> <td>Ross Wolfenden</td> <td>11/28/2012</td> </tr> <tr> <td>Neil R. Pumford</td> <td>11/28/2012</td> </tr> <tr> <td>Anita Menconi</td> <td>11/28/2012</td> </tr> <tr> <td>Guillermo Tellez</td> <td>11/28/2012</td> </tr> <tr> <td>Marion Morgan</td> <td>11/28/2012</td> </tr> <tr> <td>Amanda Wolfenden</td> <td>11/28/2012</td> </tr> <tr> <td>Srichaitanya Shirvaramaiah</td> <td>11/21/2012</td> </tr> </tbody> </table> |                                                     | Name          | Execution Date | Billy Hargis        | 11/28/2012 | Ross Wolfenden | 11/28/2012 | Neil R. Pumford | 11/28/2012 | Anita Menconi | 11/28/2012 | Guillermo Tellez | 11/28/2012 | Marion Morgan | 11/28/2012 | Amanda Wolfenden | 11/28/2012 | Srichaitanya Shirvaramaiah | 11/21/2012 |
| Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Execution Date                                      |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Billy Hargis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 11/28/2012                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Ross Wolfenden                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 11/28/2012                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Neil R. Pumford                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 11/28/2012                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Anita Menconi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11/28/2012                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Guillermo Tellez                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 11/28/2012                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Marion Morgan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11/28/2012                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Amanda Wolfenden                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 11/28/2012                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Srichaitanya Shirvaramaiah                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 11/21/2012                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                     |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Name:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The Board of Trustees of the University of Arkansas |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Street Address:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2404 North University                               |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| City:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Little Rock                                         |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| State/Country:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ARKANSAS                                            |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Postal Code:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 72207                                               |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                     |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13810549</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                           |                                                     | Property Type | Number         | Application Number: | 13810549   |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Property Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Number                                              |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Application Number:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 13810549                                            |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                     |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Fax Number:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 4142715770                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Phone:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | (414) 271-7590                                      |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Email:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | tvaneyningen@andruslaw.com                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Correspondent Name:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Tambryn K. VanHeyningen                             |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Address Line 1:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 100 East Wisconsin                                  |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Address Line 2:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Suite 1100                                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |
| Address Line 4:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Milwaukee, WISCONSIN 53202                          |               |                |                     |            |                |            |                 |            |               |            |                  |            |               |            |                  |            |                            |            |

CH \$40.00 13810549

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| ATTORNEY DOCKET NUMBER:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5658-00178 UARK-AG        |
| NAME OF SUBMITTER:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Tambryn K. VanHeyningen   |
| Signature:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | /Tambryn K. VanHeyningen/ |
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 04/16/2013                |
| <b>Total Attachments: 7</b><br>source=2012-12-18_5658-00111_Executed_Corrected_Assignment#page1.tif<br>source=2012-12-18_5658-00111_Executed_Corrected_Assignment#page2.tif<br>source=2012-12-18_5658-00111_Executed_Corrected_Assignment#page3.tif<br>source=2012-12-18_5658-00111_Executed_Corrected_Assignment#page4.tif<br>source=2012-12-18_5658-00111_Executed_Corrected_Assignment#page5.tif<br>source=2012-12-18_5658-00111_Executed_Corrected_Assignment#page6.tif<br>source=2012-12-18_5658-00111_Executed_Corrected_Assignment#page7.tif |                           |

## ASSIGNMENT

Pursuant to our obligation to THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ARKANSAS (herein referred to as "Assignee"), having its principal place of business at:

2404 North University Avenue  
Little Rock, AR 72207

and for other valuable and sufficient consideration, receipt whereof is hereby acknowledged, we:

Billy Hargis  
3229 Oakland Zion Road  
Fayetteville, AR 72703

Ross Wolfenden  
1582 Saint Clair Street  
Pea Ridge, AR 72751

Neil R. Pumford  
3196 Ozark Acres Drive  
Bentonville, AR 72712

Marion Morgan  
1500 Clayton Street  
Springdale, AR 72762

Anita Menconi  
2000 North Garland Avenue, Apartment #89  
Fayetteville, AR 72703

Guillermo Tellez  
2744 Hardy Lane  
Fayetteville, AR 72703

Amanda Wolfenden  
1582 Saint Clair Street  
Pea Ridge, AR 72751

Srichaitanya Shivaramaiah  
709-100, Eighth Avenue  
Kitchener ON N2C 1S3  
CANADA

confirm our obligation to and effective as of July 18, 2011 hereby sell, assign and convey, unto Assignee, its successors and assigns, our entire right, title and interest –

(1) in and to an invention entitled “METHODS AND COMPOSITIONS INCLUDING SPORE-FORMING BACTERIA FOR INCREASING THE HEALTH OF ANIMALS” (Atty. File No. 5658-00111) for which International Patent Application No. PCT/US2011/044326 (hereinafter the “PCT application”) was filed July 18, 2011, which application claims the benefit of the United States Provisional Patent Application No. 61/365,188, filed July 16, 2010 (hereinafter the “U.S. provisional patent application”);

(2) in and to the PCT application and the U.S. provisional patent application, in and to all other U.S. patent applications (including PCT national phase, divisional, continuation, continuation-in-part, §111(b) provisional, §111(a), and reissue applications) based upon said invention or claiming the benefit of the PCT application, or the U.S. provisional patent application, and in and to the patent or patents to be granted thereon, to the full end of the term or terms for which said patent or patents may be granted;

(3) in and to all patent applications on said invention now or hereafter filed in countries foreign to the United States of America, including foreign applications entering the national phase of the PCT application, and in and to any and all patents granted on said applications to the full end of the terms for which said patents may be granted; and

(4) in and to all applications filed under International Conventions on the invention or claiming priority to the PCT application and the U.S. provisional patent application.

We agree that any patent applications with a claim to priority based on the PCT application or the U.S. provisional patent application filed in any foreign countries may be filed in the name of Assignee.

We hereby agree that we will, upon demand of Assignee, its successors or assigns, and without further consideration to us, execute any and all papers that may be necessary, or deemed to be necessary, by Assignee, its successors or assigns, to complete fulfillment of the intent and purposes of this Assignment, it being understood that any expense incident to the execution of such papers shall be paid by Assignee, its successors and assigns, and not by us.

The Commissioner of Patents and Trademarks of the United States is hereby authorized and requested to issue said patent or patents to Assignee.

11/28/12  
Date

BM Hargis  
Billy Hargis, Inventor

State of Arkansas )  
County of Washington )

I hereby certify that Billy Hargis, personally known to me to be the same person or persons who signed the foregoing instrument, appeared before me this day and acknowledge that said instrument was signed and delivered as the free and voluntary act of Billy Hargis for the uses and purposes therein set forth.

Given under my hand and seal, this 28 day of November, 20 12



Susan McCranie  
, Notary Public

11/28/12  
Date

Ross Wolfenden  
Ross Wolfenden, Inventor

State of Arkansas )  
County of Washington )

I hereby certify that Ross Wolfenden, personally known to me to be the same person or persons who signed the foregoing instrument, appeared before me this day and acknowledge that said instrument was signed and delivered as the free and voluntary act of Ross Wolfenden for the uses and purposes therein set forth.

Given under my hand and seal, this 28 day of November, 20 12



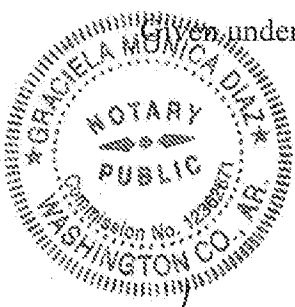
Susan McCranie  
, Notary Public

11/28/12  
Date

Neil R. Pumford  
Neil R. Pumford, Inventor

State of Arkansas )  
County of Washington )

I hereby certify that Neil R. Pumford, personally known to me to be the same person or persons who signed the foregoing instrument, appeared before me this day and acknowledge that said instrument was signed and delivered as the free and voluntary act of \_\_\_\_\_, for the uses and purposes therein set forth.



Given under my hand and seal, this 28 day of November, 2012

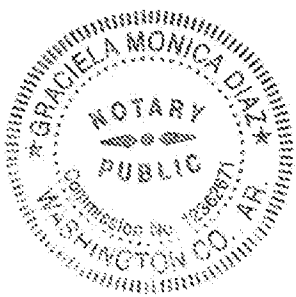
Graciela Monica Diaz, Notary Public

11/28/12  
Date

Anita Menconi  
Anita Menconi, Inventor

State of Arkansas )  
County of Washington )

I hereby certify that Anita Menconi, personally known to me to be the same person or persons who signed the foregoing instrument, appeared before me this day and acknowledge that said instrument was signed and delivered as the free and voluntary act of \_\_\_\_\_, for the uses and purposes therein set forth.



Given under my hand and seal, this 28 day of November, 2012

Graciela Monica Diaz, Notary Public

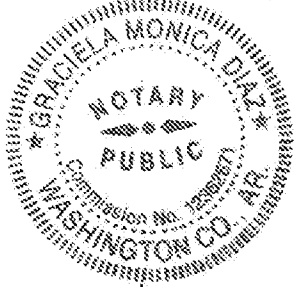
11/28/12  
Date

Guillermo Tellez Tellez  
Guillermo Tellez, Inventor

State of Arkansas )  
County of Washington )

I hereby certify that Guillermo Tellez Tellez, personally known to me to be the same person or persons who signed the foregoing instrument, appeared before me this day and acknowledge that said instrument was signed and delivered as the free and voluntary act of \_\_\_\_\_, for the uses and purposes therein set forth.

Given under my hand and seal, this 28 day of November, 2012.



Graciela Monica Diaz, Notary Public

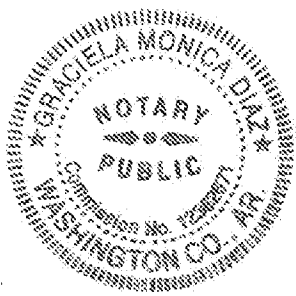
11/28/12  
Date

Marion Morgan  
Marion Morgan, Inventor

State of Arkansas )  
County of Washington )

I hereby certify that Marion Morgan, personally known to me to be the same person or persons who signed the foregoing instrument, appeared before me this day and acknowledge that said instrument was signed and delivered as the free and voluntary act of \_\_\_\_\_, for the uses and purposes therein set forth.

Given under my hand and seal, this 28 day of November, 2012.



Graciela Monica Diaz, Notary Public

11-28-12  
Date

[Signature]  
Amanda Wolfenden, Inventor

State of Arkansas )  
County of Washington )

I hereby certify that Amanda Wolfenden, personally known to me to be the same person or persons who signed the foregoing instrument, appeared before me this day and acknowledge that said instrument was signed and delivered as the free and voluntary act of Amanda Wolfenden, for the uses and purposes therein set forth.

Given under my hand and seal, this 28 day of November, 2012.



Susan McCrane  
, Notary Public

\_\_\_\_\_  
Date

\_\_\_\_\_  
Srichaitanya Shivaramaiah, Inventor

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

I hereby certify that \_\_\_\_\_, personally known to me to be the same person or persons who signed the foregoing instrument, appeared before me this day and acknowledge that said instrument was signed and delivered as the free and voluntary act of \_\_\_\_\_, for the uses and purposes therein set forth.

Given under my hand and seal, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

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



Date \_\_\_\_\_

Amanda Wolfenden, Inventor

State of \_\_\_\_\_ )

County of \_\_\_\_\_ )

I hereby certify that \_\_\_\_\_, personally known to me to be the same person or persons who signed the foregoing instrument, appeared before me this day and acknowledge that said instrument was signed and delivered as the free and voluntary act of \_\_\_\_\_, for the uses and purposes therein set forth.

Given under my hand and seal, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

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

Nov 21, 2012  
Date

S. Srichaitanya  
Srichaitanya Shivaramaiah, Inventor

Province  
State of Ontario )  
County of Wellington )

I hereby certify that Srichaitanya Shivaramaiah, personally known to me to be the same person or persons who signed the foregoing instrument, appeared before me this day and acknowledge that said instrument was signed and delivered as the free and voluntary act of Srichaitanya Shivaramaiah, for the uses and purposes therein set forth.

Given under my hand and seal, this 21<sup>st</sup> day of November, 2012.

Jessica Eyan Freedman  
Jessica Eyan Freedman, Notary Public  
LSUC # 59797F  
6