

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

EPAS ID: PAT3160688

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SEAN FARMER	12/04/2014
MICHAEL A. BUSH	12/04/2014
DAVID KELLER	12/04/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	GANEDEN BIOTECH, INC.
<b>Street Address:</b>	5800 LANDERBROOK DRIVE
<b>Internal Address:</b>	3RD FLOOR
<b>City:</b>	MAYFIELD HEIGHTS
<b>State/Country:</b>	OHIO
<b>Postal Code:</b>	44124
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14064863
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(617)542-2241
<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>	617-542-6000
<b>Email:</b>	srichards@mintz.com
<b>Correspondent Name:</b>	MINTZ LEVIN USPTO
<b>Address Line 1:</b>	ONE FINANCIAL CENTER
<b>Address Line 4:</b>	BOSTON, MASSACHUSETTS 02111
<b>ATTORNEY DOCKET NUMBER:</b>	19374-524C01US
<b>NAME OF SUBMITTER:</b>	INGRID A. BEATTIE
<b>SIGNATURE:</b>	/Ingrid A. Beattie/
<b>DATE SIGNED:</b>	12/23/2014
<b>Total Attachments: 3</b>	
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## ASSIGNMENT

We, **Sean Farmer, Michael A. Bush, and David Keller**, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, confirm that we have sold and assigned, and do hereby assign, sell and transfer to **Ganeden Biotech, Inc.**, with offices at **5800 Landerbrook Drive, 3rd Floor, Mayfield Heights, OH 44124**, and to its successors, assigns and legal representatives, collectively hereinafter referred to as the ASSIGNEE: (1) our entire right, title and interest for the United States and in all countries, in and to any and all inventions, discoveries and applications which are disclosed in the application for United States Letters Patent entitled:

### INACTIVATED BACTERIAL CELL FORMULATION

filed with the U.S. Patent and Trademark Office on **October 28, 2013** and assigned **U.S. Application No. 14/064,863**, which claims priority to and/or the benefit of **U.S. Application No. 12/770,457**, filed on **April 29, 2010**, now **U.S. Patent No. 8,568,743**, which claims priority to and/or the benefit of **U.S. Provisional Application No. 61/285,255**, filed on **December 10, 2009** and **U.S. Provisional Application No. 61/214,876**, filed on **April 29, 2009**, and including any subsequently filed applications in any country of the world, which claim priority to, and/or the benefit of, any of **U.S. Application No. 14/064,863, U.S. Patent No. 8,568,743** and **U.S. Provisional Application Nos. 61/285, 255 and 61/214,876**, and including any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof and any substitute applications thereof; (2) the full and complete right to file patent applications in the name of the ASSIGNEE, its designee, or in our names as the ASSIGNEE, or its designee's election, on the aforesaid inventions, discoveries and applications in all countries of the world; (3) the entire right, title and interest in and to any Letters Patent which may issue thereon in the United States or in any country, and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same; and (4) the entire right, title and interest in all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the above inventions, discoveries and applications.

We hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in the United States and throughout the world to the ASSIGNEE of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

We agree, at any time, upon the request of the ASSIGNEE, to execute and to deliver to the ASSIGNEE any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries, or applications and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

First Inventor : Sean Farmer  
Application No. : 14/064,863  
Filed : October 28, 2013  
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We further agree at any time to execute and to deliver upon request of the ASSIGNEE such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect the rights of the ASSIGNEE under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

We hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

We further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

Date: 12/04/14 Signature of: Sean Farmer

State of Ohio  
County of Cuyahoga

On this 4<sup>th</sup> day of December, 2014, before me, the undersigned notary public, personally appeared **Sean Farmer**, proved to me through satisfactory evidence of identification, which was a Driver's License, to be the person whose name is signed on this document and who swore or affirmed to me that the contents of this document are truthful and accurate to the best of his/her knowledge and belief.

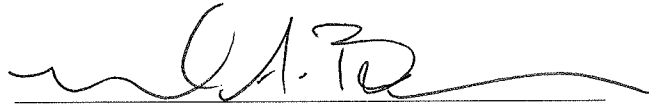


ANDRELIE D. BRANICKY  
NOTARY PUBLIC - OH  
MY COMMISSION EXPIRES  
JULY 29, 2019

ADB  
Notary Public  
My commission expires July 29, 2019

First Inventor : Sean Farmer  
Application No. : 14/064,863  
Filed : October 28, 2013  
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Date: 12/4/2014

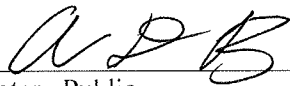
  
Signature of: **Michael A. Bush**

State of Ohio  
County of Cuyahoga

On this 4th day of December, 2014, before me, the undersigned notary public, personally appeared **Michael A. Bush**, proved to me through satisfactory evidence of identification, which was a Driver's License, to be the person whose name is signed on this document and who swore or affirmed to me that the contents of this document are truthful and accurate to the best of his/her knowledge and belief.




ANDRELIE D. BRANICKY  
NOTARY PUBLIC - OH  
MY COMMISSION EXPIRES  
JULY 29, 2019

  
Notary Public

My commission expires July 29, 2019

Date: 12/4/2014

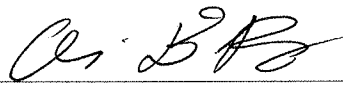
  
Signature of: **David Keller**

State of Ohio  
County of Cuyahoga

On this 4th day of December, 2014, before me, the undersigned notary public, personally appeared **David Keller**, proved to me through satisfactory evidence of identification, which was a Driver's License, to be the person whose name is signed on this document and who swore or affirmed to me that the contents of this document are truthful and accurate to the best of his/her knowledge and belief.



ANDRELIE D. BRANICKY  
NOTARY PUBLIC - OH  
MY COMMISSION EXPIRES  
JULY 29, 2019

  
Notary Public

My commission expires July 29, 2019

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