

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7962259

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
EMERGENT BIODEFENSE OPERATIONS LANSING LLC	05/15/2023
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINISTRATIVE AGENT
<b>Street Address:</b>	600 S. 4TH STREET, 12TH FLOOR
<b>Internal Address:</b>	MAC: N9300-129
<b>City:</b>	MINNEAPOLIS
<b>State/Country:</b>	MINNESOTA
<b>Postal Code:</b>	55415
<b>PROPERTY NUMBERS Total: 11</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	7201912
Patent Number:	8642577
Patent Number:	8569321
Patent Number:	9303051
Patent Number:	8614200
Patent Number:	10112909
Patent Number:	10487061
Patent Number:	11066373
Patent Number:	9371344
Patent Number:	9862687
Patent Number:	8962829
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(704)373-8822
<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>	7043734640
<b>Email:</b>	bsmith@mcguirewoods.com
<b>Correspondent Name:</b>	BETTY G. SMITH, SENIOR PARALEGAL
<b>Address Line 1:</b>	MCGUIREWOODS LLP, 201 N. TRYON ST.

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<b>ATTORNEY DOCKET NUMBER:</b>	2029724-1959
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<b>NAME OF SUBMITTER:</b>	BETTY G. SMITH
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<b>SIGNATURE:</b>	/Betty G. Smith/
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<b>DATE SIGNED:</b>	05/18/2023
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**Total Attachments: 4**

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**NOTICE  
OF  
GRANT OF SECURITY INTEREST  
IN  
PATENTS**

Dated as of May 15, 2023

United States Patent and Trademark Office

Ladies and Gentlemen:

Please be advised that pursuant to the Amended and Restated Collateral Agreement dated as of October 15, 2018 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the “Agreement”) among the Grantor (as identified on the signature pages hereto), the other grantors party thereto and the Administrative Agent (as identified on the signature pages hereto) for the Secured Parties referenced therein, the undersigned Grantor has granted a continuing security interest in and continuing lien upon the patents and patent applications identified on Schedule A to the Administrative Agent for the ratable benefit of the Secured Parties.

The Grantor and the Administrative Agent, on behalf of the Secured Parties, hereby acknowledge and agree that the security interest in such patents and patent applications (a) may only be terminated in accordance with the terms of the Agreement and (b) is not to be construed as an assignment of any patent or patent application.

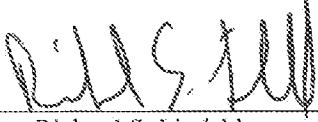
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Very truly yours,

**GRANTOR:**

**EMERGENT BIODEFENSE OPERATIONS  
LANSING LLC**

Emergent BioDefense Operations Lansing LLC  
3500 N. Martin Luther King Jr. Blvd.  
Lansing, MI 48906

By:   
Name: Richard S. Lindahl  
Title: Treasurer

JURISDICTION OF FORMATION OF  
GRANTOR: Delaware

Emergent BioDefense Operations Lansing LLC  
Notice of Grant of Security Interest in Patents  
Signature Page

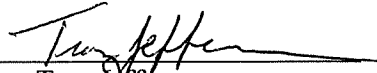
**PATENT**  
**REEL: 063689 FRAME: 0957**

Acknowledged and accepted:

**ADMINISTRATIVE AGENT:**

Wells Fargo Bank, National Association  
600 Wells Fargo  
600 S. 4th Street, 12th Floor  
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MAC: N9300-129

**WELLS FARGO BANK, NATIONAL  
ASSOCIATION, as Administrative Agent**

By:   
Name: : Troy Jefferson  
Title: Senior Vice President

**SCHEDULE A  
TO  
NOTICE  
OF  
GRANT OF SECURITY INTEREST  
IN  
PATENTS**

**PATENTS**

<b>Title</b>	<b>Country</b>	<b>Grant Date</b>	<b>Registration Number</b>
RECOMBINANT IMMUNOGENIC COMPOSITIONS AND METHODS FOR PROTECTING AGAINST LETHAL INFECTIONS FROM BACILLUS ANTHRACIS	United States	4/10/2007	7201912
COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT OF POXVIRUS INFECTIONS	United States	2/4/2014	8642577
PHOSPHONATE ESTER DERIVATIVES AND METHODS OF SYNTHESIS THEREOF	United States	10/29/2013	8569321
PHOSPHONATE ESTER DERIVATIVES AND METHODS OF SYNTHESIS THEREOF	United States	4/5/2016	9303051
COMPOUNDS, COMPOSITIONS AND METHODS FOR TREATING OCULAR CONDITIONS	United States	12/24/2013	8614200
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	United States	10/30/2018	10112909
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	United States	11/26/2019	10487061
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	United States	7/20/2021	11066373
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	United States	6/21/2016	9371344
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	United States	1/9/2018	9862687
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	United States	2/24/2015	8962829