

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

Assignment ID: PATI468906

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	NOTICE OF GRANT OF SECURITY INTEREST IN U.S. PATENTS

**CONVEYING PARTY DATA**

Name	Execution Date
Emergent BioDefense Operations Lansing LLC	08/30/2024
Emergent BioSolutions Canada Inc.	08/30/2024
Emergent BioSolutions Inc.	08/30/2024
Emergent Manufacturing Operations Baltimore LLC	08/30/2024
Emergent Product Development Gaithersburg Inc.	08/30/2024
Emergent Travel Health Inc.	08/30/2024

**RECEIVING PARTY DATA**

<b>Company Name:</b>	OHA AGENCY LLC
<b>Street Address:</b>	1 Vanderbilt Avenue
<b>Internal Address:</b>	16th Floor
<b>City:</b>	New York
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	10017

**PROPERTY NUMBERS Total: 39**

Property Type	Number
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
Patent Number:	11912667
Application Number:	18414198
Application Number:	17872921
Patent Number:	9751919

**PATENT**

Property Type	Number
Patent Number:	10117933
Application Number:	18246373
Patent Number:	8778359
Patent Number:	7601351
Patent Number:	7906119
Patent Number:	8703153
Patent Number:	D957624
Patent Number:	D965767
Patent Number:	8445670
Patent Number:	10517865
Patent Number:	8962842
Patent Number:	9403818
Patent Number:	10155021
Patent Number:	10144727
Patent Number:	10357559
Patent Number:	10428022
Patent Number:	6723325
Patent Number:	7115270
Application Number:	17919574
Application Number:	18043996
Application Number:	18246982
Application Number:	18279920
Patent Number:	11969465
Patent Number:	8865182
Patent Number:	9408899

**CORRESPONDENCE DATA**

**Fax Number:** 2147467777  
*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.*

**Phone:** 2147467700  
**Email:** juan.arias@weil.com  
**Correspondent Name:** William Keller  
**Address Line 1:** Weil, Gotshal & Manges LLP  
**Address Line 2:** 200 Crescent Court, Suite 300  
**Address Line 4:** Dallas, TEXAS 75201-6950

<b>NAME OF SUBMITTER:</b>	JUAN CARLOS ARIAS
<b>SIGNATURE:</b>	JUAN CARLOS ARIAS
<b>DATE SIGNED:</b>	09/03/2024

**Total Attachments: 9**

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NOTICE OF GRANT OF SECURITY INTEREST IN U.S. PATENTS

NOTICE OF GRANT OF SECURITY INTEREST IN U.S. PATENTS, dated as of August 30, 2024 (this “Notice”), made by Emergent BioDefense Operations Lansing LLC, a Delaware limited liability company, Emergent BioSolutions Canada Inc., a Canadian corporation, Emergent BioSolutions Inc., a Delaware corporation, Emergent Manufacturing Operations Baltimore LLC, a Delaware limited liability company, Emergent Product Development Gaithersburg Inc., a Delaware corporation, and Emergent Travel Health Inc., a Delaware corporation (each, a “Grantor,” and collectively, the “Grantors”), in favor of OHA AGENCY LLC, as Administrative Agent (as defined below).

Reference is made to the Collateral Agreement, dated as of August 30, 2024 (as amended, restated, supplemented or otherwise modified from time to time, the “Collateral Agreement”), among EMERGENT BIOSOLUTIONS INC., a Delaware corporation (the “Borrower”), certain Domestic Subsidiaries (as defined therein) of the Borrower and any Additional Grantor (as defined therein) and OHA Agency LLC, as administrative agent (together with its successors and assigns in such capacity, the “Administrative Agent”) for the Secured Parties (as defined therein).

SECTION 1. *Terms.* Capitalized terms used in this Notice and not otherwise defined herein have the meanings specified in the Collateral Agreement. The rules of construction specified in Section 1.3(a) of the Collateral Agreement also apply to this Notice.

SECTION 2. *Grant of Security Interest.* As security for the payment and performance, as applicable, in full of the Secured Obligations, each Grantor pursuant to the Collateral Agreement did, and hereby does, grant and pledge to the Administrative Agent, its successors and permitted assigns, for the benefit of the Secured Parties, a continuing security interest in all of such Grantor’s right, title and interest in, to and under any and all of the following assets now owned or at any time hereafter acquired by such Grantor or in which such Grantor now has or at any time in the future may acquire any right, title or interest (collectively, but excluding any Excluded Asset, the “Patent Collateral”):

all Patents of the United States of America, including those listed on Schedule I.

SECTION 3. *Collateral Agreement.* The security interests granted to the Administrative Agent herein are granted in furtherance, and not in limitation of, the security interests granted to the Administrative Agent pursuant to the Collateral Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of the Administrative Agent with respect to the Patent Collateral are more fully set forth in the Collateral Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this Notice and the Collateral Agreement, the terms of the Collateral Agreement shall govern.

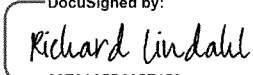
SECTION 4. *Counterparts.* This Notice may be executed in two or more counterparts, each of which shall constitute an original but all of which when taken together shall constitute but one contract. Delivery of an executed counterpart to this Notice by facsimile or other electronic transmission shall be as effective as delivery of a manually signed original.

SECTION 5. *Governing Law.* THIS NOTICE AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSES OF ACTION (WHETHER IN CONTRACT OR TORT OR OTHERWISE) BASED UPON, ARISING OUT OF OR RELATING TO THIS NOTICE AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES UNDER THIS NOTICE SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO ANY PRINCIPLE OF CONFLICTS OF LAW THAT COULD REQUIRE THE APPLICATION OF ANY OTHER LAW.

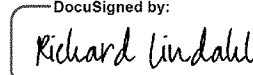
[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have duly executed this Notice as of the day and year first above written.

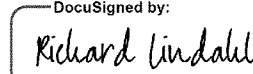
EMERGENT BIOSOLUTIONS INC.

DocuSigned by:  
  
By: \_\_\_\_\_  
Name: Richard S. Lindahl  
Title: Executive Vice President, Chief Financial Officer  
and Treasurer

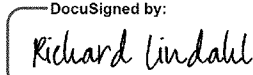
EMERGENT BIODEFENSE OPERATIONS LANSING  
LLC

DocuSigned by:  
  
By: \_\_\_\_\_  
Name: Richard S. Lindahl  
Title: Treasurer

EMERGENT MANUFACTURING OPERATIONS  
BALTIMORE LLC

DocuSigned by:  
  
By: \_\_\_\_\_  
Name: Richard S. Lindahl  
Title: Executive Manager

EMERGENT PRODUCT DEVELOPMENT  
GAITHERSBURG INC.

DocuSigned by:  
  
By: \_\_\_\_\_  
Name: Richard S. Lindahl  
Title: Treasurer

EMERGENT TRAVEL HEALTH INC.

DocuSigned by:

*Richard Lindahl*

By:

Name: Richard S. Lindahl

Title: Treasurer


EMERGENT BIOSOLUTIONS CANADA, INC.

Signed by:  
*Frank Vargo*  
84A31B277EF24ED...

By: \_\_\_\_\_  
Name: Frank Vargo  
Title: Assistant Treasurer

**OHA AGENCY LLC**

By: Oak Hill Advisors, L.P., its managing member

By: 

Name: Gregory S. Rubin

Title: Authorized Signatory



Schedule I  
to Notice of Grant of Security Interest in U.S. Patents

Patents Owned by Emergent BioDefense Operations Lansing LLC

*U.S. Patent Registrations*

Title	Issue Date	Patent Number
COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT OF POXVIRUS INFECTIONS	2/4/2014	US8642577
PHOSPHONATE ESTER DERIVATIVES AND METHODS OF SYNTHESIS THEREOF	10/29/2013	US8569321
PHOSPHONATE ESTER DERIVATIVES AND METHODS OF SYNTHESIS THEREOF	4/5/2016	US9303051
COMPOUNDS, COMPOSITIONS AND METHODS FOR TREATING OCULAR CONDITIONS	12/24/2013	US8614200
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	10/30/2018	US10112909
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	11/26/2019	US10487061
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	7/20/2021	US11066373
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	6/21/2016	US9371344
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	1/9/2018	US9862687
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	2/24/2015	US8962829
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	2/27/2024	US11912667

*U.S. Patent Applications*

Title	Filing Date	Application Number
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	1/16/2024	18/414198
FORMULATIONS OF BRINCIDOFOVIR	7/25/2022	17/872921
MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	7/4/2024	18/414,198

Patents Owned by Emergent BioSolutions Canada Inc.

*U.S. Patent Registrations*

<b>Title</b>	<b>Issue Date</b>	<b>Patent Number</b>
ANTIMICROBIAL COMPOSITIONS COMPRISING A HYALURONIC ACID BINDING PEPTIDE AND A BETA-LACTAM ANTIBIOTIC	9/5/2017	US9751919
ANTIBODIES AGAINST CLOSTRIDIUM DIFFICILE	11/6/2018	US10117933

*U.S. Patent Applications*

<b>Title</b>	<b>Filing Date</b>	<b>Application Number</b>
HYPERIMMUNE GLOBULIN FORMULATIONS	4/15/2024	18/246,373

Patents Owned by Emergent BioSolutions Inc.

*U.S. Patent Registrations*

<b>Title</b>	<b>Issue Date</b>	<b>Patent Number</b>
STABLE ANTHRAX VACCINE FORMULATIONS	7/15/2014	US8778359

*U.S. Patent Applications*

None.

Patents Owned by Emergent Manufacturing Operations Baltimore LLC

*U.S. Patent Registrations*

<b>Title</b>	<b>Issue Date</b>	<b>Patent Number</b>
ANTIBODIES AGAINST PROTECTIVE ANTIGEN	10/13/2009	US7601351
ANTIBODIES AGAINST PROTECTIVE ANTIGEN	3/15/2011	US7906119

*U.S. Patent Applications*

None.

Sched. I-2

Patents Owned by Emergent Product Development Gaithersburg Inc.

*U.S. Patent Registrations*

<b>Title</b>	<b>Issue Date</b>	<b>Patent Number</b>
SALMONELLA VECTORED VACCINES AGAINST CHLAMYDIA AND METHODS OF USE	4/22/2014	US8703153
AUTOINJECTOR	7/12/2022	USD957624
AUTOINJECTOR	10/4/2022	USD965767
COMBINATORIAL LIBRARY APPROACH TO IMINOCYCLITOLS WITH BIOLOGICAL ACTIVITY	5/21/2013	US8445670
2-PYRIDONE ANTIMICROBIAL COMPOSITIONS	12/31/2019	US10517865
2-PYRIDONE ANTIMICROBIAL COMPOSITIONS	2/24/2015	US8962842
ANTIMICROBIAL 4-OXOQUINOLIZINES	8/2/2016	US9403818
ANTIMICROBIAL 4-OXOQUINOLIZINES	12/18/2018	US10155021
DEOXYNOJIRIMYCIN DERIVATIVES AND METHODS OF THEIR USING	12/4/2018	US10144727
TEMPERATURE STABLE VACCINE FORMULATIONS	7/23/2019	US10357559
IMINOSUGARS USEFUL FOR THE TREATMENT OF VIRAL DISEASES	10/1/2019	US10428022
SMALLPOX VACCINE	4/20/2004	US6723325
SMALLPOX VACCINE	10/3/2006	US7115270

*U.S. Patent Applications*

<b>Title</b>	<b>Filing Date</b>	<b>Application Number</b>
OPIOID ANTAGONIST FORMULATIONS	10/18/2022	17/919574
AUTOINJECTOR FOR ADMINISTRATION OF MEDICATIONS	3/3/2023	18/043996
STABILIZED ALKYL NITRITE COMPOSITIONS	3/28/2023	18/246982
VALIOLAMINE DERIVATIVES AS GLUCOSIDASE INHIBITORS	5/30/2024	18/279,920

Patents Owned by Emergent Travel Health Inc.

*U.S. Patent Registrations*

<b>Title</b>	<b>Issue Date</b>	<b>Patent Number</b>
TOXOPLASMA GONDII VACCINES AND THEIR USE	4/30/2024	US11969465
ADENOVIRAL-BASED VECTORS	10/21/2014	US8865182
VACCINES AGAINST TOXOPLASMA GONDII	8/9/2016	US9408899

*U.S. Patent Applications*

None.