

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

Assignment ID: PATI532803

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
EMERGENT BIODEFENSE OPERATIONS LANSING LLC	09/30/2024
EMERGENT BIOSOLUTIONS INC.	09/30/2024
EMERGENT PRODUCT DEVELOPMENT GAITHERSBURG INC.	09/30/2024
EMERGENT MANUFACTURING OPERATIONS BALTIMORE LLC	09/30/2024
EMERGENT TRAVEL HEALTH INC.	09/30/2024
EMERGENT BIOSOLUTIONS CANADA INC.	09/30/2024

RECEIVING PARTY DATA

Company Name:	WELLS FARGO BANK, NATIONAL ASSOCIATION
Street Address:	1800 Century Park East
City:	Los Angeles
State/Country:	CALIFORNIA
Postal Code:	90067

PROPERTY NUMBERS Total: 38

Property Type	Number
Patent Number:	D957624
Patent Number:	D965767
Patent Number:	8642577
Patent Number:	8445670
Patent Number:	8778359
Patent Number:	8569321
Patent Number:	9303051
Patent Number:	8614200
Patent Number:	10517865
Patent Number:	8962842
Patent Number:	9403818
Patent Number:	10155021
Patent Number:	10144727
Patent Number:	10357559
Patent Number:	10428022

PATENT

Property Type	Number
Patent Number:	10112909
Patent Number:	10487061
Patent Number:	11066373
Patent Number:	9371344
Patent Number:	9862687
Patent Number:	8962829
Patent Number:	7601351
Patent Number:	7906119
Patent Number:	11912667
Patent Number:	8865182
Patent Number:	9408899
Patent Number:	9751919
Patent Number:	10117933
Patent Number:	11969465
Application Number:	18414198
Application Number:	17872921
Application Number:	17919574
Application Number:	18043996
Application Number:	18246982
Application Number:	18246373
Application Number:	18279920
Application Number:	18004262
Application Number:	18690650

CORRESPONDENCE DATA

Fax Number:

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: 7136328629

Email: kareem.ansley@blankrome.com

Correspondent Name: KAREEM ANSLEY

Address Line 1: BLANK ROME LLP

Address Line 2: 717 TEXAS AVENUE, SUITE 1400

Address Line 4: HOUSTON, TEXAS 77002

ATTORNEY DOCKET NUMBER: 155656-00004

NAME OF SUBMITTER: Kareem Ansley

SIGNATURE: Kareem Ansley

DATE SIGNED: 09/30/2024

Total Attachments: 8

source=Notice of Grant of Security Interest in U.S. Intellectual Property - Patents (Wells-EBS)#page1.tiff
source=Notice of Grant of Security Interest in U.S. Intellectual Property - Patents (Wells-EBS)#page2.tiff
source=Notice of Grant of Security Interest in U.S. Intellectual Property - Patents (Wells-EBS)#page3.tiff
source=Notice of Grant of Security Interest in U.S. Intellectual Property - Patents (Wells-EBS)#page4.tiff
source=Notice of Grant of Security Interest in U.S. Intellectual Property - Patents (Wells-EBS)#page5.tiff
source=Notice of Grant of Security Interest in U.S. Intellectual Property - Patents (Wells-EBS)#page6.tiff
source=Notice of Grant of Security Interest in U.S. Intellectual Property - Patents (Wells-EBS)#page7.tiff
source=Notice of Grant of Security Interest in U.S. Intellectual Property - Patents (Wells-EBS)#page8.tiff

NOTICE OF GRANT OF SECURITY INTEREST IN PATENTS

NOTICE OF GRANT OF SECURITY INTEREST IN PATENTS, dated as of September 30, 2024 (this “Notice”), made by **EMERGENT BIOSOLUTIONS INC.**, a Delaware corporation (“EBS”), **EMERGENT BIODEFENSE OPERATIONS LANSING LLC**, a Delaware limited liability company (“BioDefense”), **EMERGENT PRODUCT DEVELOPMENT GAITHERSBURG INC.**, a Delaware corporation (“PD”), **EMERGENT MANUFACTURING OPERATIONS BALTIMORE LLC**, a Delaware limited liability company (“Manufacturing”), **EMERGENT TRAVEL HEALTH INC.**, a Delaware corporation (“Travel”), and **EMERGENT BIOSOLUTIONS CANADA INC.**, a Canadian federal corporation (“Canada”; together with EBS, BioDefense, PD, Manufacturing, and Travel, collectively, the “Grantors” and each individually, a “Grantor”), in favor of **WELLS FARGO BANK, NATIONAL ASSOCIATION**, as Agent (as defined below).

Reference is made to the Collateral Agreement, dated as of September 30, 2024 (as amended, restated, supplemented or otherwise modified from time to time, the “Collateral Agreement”), among EBS, certain Subsidiaries (as defined therein) of EBS and any Additional Grantor (as defined therein) and Wells Fargo Bank, National Association, as administrative agent (together with its successors and assigns in such capacity, the “Agent”) for the Lender Group and Bank Product Providers.

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 Agent, its successors and permitted assigns, for the benefit of the Lender Group and the Bank Product Providers, 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 Agent herein are granted in furtherance, and not in limitation of, the security interests granted to Agent pursuant to the Collateral Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of 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.

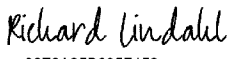
SECTION 4. *Counterparts.* This Notice may be executed in two or more counterparts, each of which shall constitute an original but all of which when taken together shall constitute but one contract. Delivery of an executed counterpart to this Notice by facsimile or other electronic transmission shall 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 BIODEFENSE OPERATIONS
LANSING LLC**

By: 
DocuSigned by:
06F3A85B635F458...
Name: Richard S. Lindahl
Title: Treasurer


EMERGENT BIOSOLUTIONS INC.

By: 
DocuSigned by:
06F3A85B635F458...
Name: Richard S. Lindahl
Title: Executive Vice President, Chief
Financial Officer and Treasurer


**EMERGENT PRODUCT DEVELOPMENT
GAITHERSBURG INC.**

By: 
DocuSigned by:
06F3A85B635F458...
Name: Richard S. Lindahl
Title: Treasurer

**EMERGENT MANUFACTURING OPERATIONS
BALTIMORE LLC**

By: 
DocuSigned by:
06F3A85B635F458...
Name: Richard S. Lindahl
Title: Executive Manager

EMERGENT TRAVEL HEALTH INC.

By: 
DocuSigned by:
06F3A85B635F458...
Name: Richard S. Lindahl
Title: Treasurer

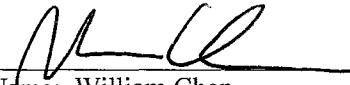
EMERGENT BIOSOLUTIONS CANADA INC.

Signed by:
Frank Vargo
84A31B277EF24ED...

By: _____

Name: Frank Vargo
Title: Assistant Treasurer

WELLS FARGO BANK, NATIONAL ASSOCIATION,
as Agent

By: 
Name: William Chan
Title: Authorized Signatory

[Signature Page to Notice of Grant of Security Interest in Patents]

PATENT
REEL: 068746 FRAME: 0705

Schedule I
to Notice of Grant of Security Interest in Patents

Patents

U.S. Patent Registrations

<u>Owner</u>	<u>Title</u>	<u>Patent No.</u>	<u>Issue Date</u>
Emergent Product Development Gaithersburg Inc.	AUTOINJECTOR	D957624 S1	7/12/2022
Emergent Product Development Gaithersburg Inc.	AUTOINJECTOR	D965767	10/4/2022
Emergent BioDefense Operations Lansing LLC	COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT OF POXVIRUS INFECTIONS	8642577	2/4/2014
Emergent Product Development Gaithersburg Inc.	COMBINATORIAL LIBRARY APPROACH TO IMINOCYCLITOLS WITH BIOLOGICAL ACTIVITY	8445670	5/21/2013
Emergent BioSolutions Inc.	STABLE ANTHRAX VACCINE FORMULATIONS	8778359	7/15/2014
Emergent BioDefense Operations Lansing LLC	PHOSPHONATE ESTER DERIVATIVES AND METHODS OF SYNTHESIS THEREOF	8569321	10/29/2013
Emergent BioDefense Operations Lansing LLC	PHOSPHONATE ESTER DERIVATIVES AND METHODS OF SYNTHESIS THEREOF	9303051	4/5/2016
Emergent BioDefense Operations Lansing LLC	COMPOUNDS, COMPOSITIONS AND METHODS FOR TREATING OCULAR CONDITIONS	8614200	12/24/2013
Emergent Product Development Gaithersburg Inc.	2-PYRIDONE ANTIMICROBIAL COMPOSITIONS	10517865	12/31/2019
Emergent Product Development Gaithersburg Inc.	2-PYRIDONE ANTIMICROBIAL COMPOSITIONS	8962842	2/24/2015
Emergent Product Development Gaithersburg Inc.	ANTIMICROBIAL 4- OXOQUINOLIZINES	9403818	8/2/2016
Emergent Product Development Gaithersburg Inc.	ANTIMICROBIAL 4- OXOQUINOLIZINES	10155021	12/18/2018
Emergent Product Development Gaithersburg Inc.	DEOXYNOJIRIMYCIN DERIVATIVES AND METHODS OF THEIR USING	10144727	12/4/2018
Emergent Product Development Gaithersburg Inc.	TEMPERATURE STABLE VACCINE FORMULATIONS	10357559	7/23/2019
Emergent Product Development Gaithersburg Inc.	IMINOSUGARS USEFUL FOR THE TREATMENT OF VIRAL DISEASES	10428022	10/1/2019
Emergent BioDefense Operations Lansing LLC	MORPHIC FORMS OF HEXADECYLOXYPROPYL- PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	10112909	10/30/2018
Emergent BioDefense Operations Lansing LLC	MORPHIC FORMS OF HEXADECYLOXYPROPYL- PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	10487061	11/26/2019
Emergent BioDefense Operations Lansing LLC	MORPHIC FORMS OF HEXADECYLOXYPROPYL- PHOSPHONATE ESTERS AND	11066373	7/20/2021

	METHODS OF SYNTHESIS THEREOF		
Emergent BioDefense Operations Lansing LLC	MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	9371344	6/21/2016
Emergent BioDefense Operations Lansing LLC	MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	9862687	1/9/2018
Emergent BioDefense Operations Lansing LLC	MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	8962829	2/24/2015
Emergent Manufacturing Operations Baltimore LLC	ANTIBODIES AGAINST PROTECTIVE ANTIGEN	7601351	10/13/2009
Emergent Manufacturing Operations Baltimore LLC	ANTIBODIES AGAINST PROTECTIVE ANTIGEN	7906119	3/15/2011
Emergent BioDefense Operations Lansing LLC	MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	11912667	2/27/2024
Emergent Travel Health Inc.	ADENOVIRAL-BASED VECTORS	8865182	10/21/2014
The University of Chicago Infectious Disease Research Institute Emergent Travel Health Inc.	VACCINES AGAINST TOXOPLASMA GONDII	9408899	8/9/2016
Emergent BioSolutions Canada Inc.	ANTIMICROBIAL COMPOSITIONS COMPRISING A HYALURONIC ACID BINDING PEPTIDE AND A beta-LACTAM ANTIBIOTIC	9751919	9/5/2017
Emergent BioSolutions Canada Inc.	ANTIBODIES AGAINST CLOSTRIDIUM DIFFICILE	10117933	11/6/2018
Emergent Travel Health Inc.	TOXOPLASMA GONDII VACCINES AND THEIR USE	11969465	4/30/2024

U.S. Patent Applications

<u>Owner</u>	<u>Title</u>	<u>Application No.</u>	<u>Filing Date</u>
Emergent BioDefense Operations Lansing LLC	MORPHIC FORMS OF HEXADECYLOXYPROPYL-PHOSPHONATE ESTERS AND METHODS OF SYNTHESIS THEREOF	18/414198	1/16/2024
Emergent BioDefense Operations Lansing LLC	FORMULATIONS OF BRINCIDOFOVIR	17/872921	7/25/2022
Emergent Product Development Gaithersburg Inc.	OPIOID ANTAGONIST FORMULATIONS	17/919574	10/18/2022
Emergent Product Development Gaithersburg Inc.	AUTOINJECTOR FOR ADMINISTRATION OF MEDICATIONS	18/043996	3/3/2023
Emergent Product Development Gaithersburg Inc.	STABILIZED ALKYL NITRITE COMPOSITIONS	18/246982	3/28/2023
Emergent BioSolutions Canada Inc.	HYPERIMMUNE GLOBULIN FORMULATIONS	18/246,373	4/15/2024
Emergent Product Development Gaithersburg Inc.	VALIOLAMINE DERIVATIVES AS GLUCOSIDASE INHIBITORS	18/279,920	5/30/2024

Emergent Product Development Gaithersburg Inc.	Deoxynojirimycin derivatives as GLUCOSIDASE inhibitors	18/004262	7/9/2021
Emergent Product Development Gaithersburg Inc.	VACCINE COMPOSITIONS	18/690650	9/15/2022