506366971 11/21/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6413727

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
IMKE ELISABETH MULDER	02/12/2020
ANNA ETTORRE	03/25/2020
SUAAD AHMED	02/12/2020
PARTHENA FOTIADOU	02/12/2020
SAMANTHA YUILLE	02/12/2020
JOSEPH ROBY IRINGAN URCIA	03/28/2020
HELENE SAVIGNAC	05/02/2020

RECEIVING PARTY DATA

Name:	4D PHARMA RESEARCH LIMITED
Street Address:	LIFE SCIENCES INNOVATION BUILDING
Internal Address:	CORNHILL ROAD
City:	ABERDEEN
State/Country:	UNITED KINGDOM
Postal Code:	AB25 2ZS

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16713911

CORRESPONDENCE DATA

Fax Number: (650)493-6811

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: 6504939300 Email: rrsmith@wsgr.com

Correspondent Name: WILSON SONSINI GOODRICH & ROSATI

Address Line 1: 650 PAGE MILL ROAD

Address Line 4: PALO ALTO, CALIFORNIA 94304

ATTORNEY DOCKET NUMBER:	56708-727.301
NAME OF SUBMITTER:	MOONKYOUNG UM
SIGNATURE:	/Moonkyoung Um/

PATENT 506366971 REEL: 054497 FRAME: 0451

DATE SIGNED:	11/21/2020	
Total Attachments: 8		
source=56708-727.301 - Executed Assignment (all inventors)#page1.tif		
source=56708-727.301 - Executed Assignment (all inventors)#page2.tif		
source=56708-727.301 - Executed Assignment (all inventors)#page3.tif		
source=56708-727.301 - Executed Assignment (all inventors)#page4.tif		
source=56708-727.301 - Executed Assignment (all inventors)#page5.tif		
source=56708-727.301 - Executed Assignment (all inventors)#page6.tif		
source=56708-727.301 - Executed Assignment (all inventors)#page7.tif		
source=56708-727.301 - Executed Assignment (all inventors)#page8.tif		

PATENT REEL: 054497 FRAME: 0452

Docket Number 56708-727.301 PATENT ASSIGNMENT WHEREAS, the undersigned: 2. Arma ETTORRE 1. Imke Elisabeth MULDER c/o 4D Pharma Research Limited c/o 4D Pharma Research Linsited Life Sciences Innovation Building, Combill Road Life Sciences Innovation Building, Cornhill Road Aberdeen, GB AB25 2ZS Aberdeen, GB AB25 2ZS 4. Parthena FOTIADOU 3. Snaad ARMED c/o 4D Pharma Research Limited c/o 4D Pharma Research Limited Life Sciences Innovation Building, Combill Road Life Sciences Innovation Building, Combill Road Aberdeen, GB AB25 2Z8 Aberdeen, GB AB25 2ZS 6. Joseph Roby Iringan URCIA 5. Samantha YUELLE c/o 4D Pharma Research Limited 27 Auchmill Terrace, Bucksburn Life Sciences Innovation Building, Combill Road Aberdeen, GB AB21 9LF Aberdeen, GB AB25 2ZS 7. Helene SAVIGNAC c/o 4D Pharma Research Limited Life Sciences Innovation Building, Combill Road Aberdeen, GB AB25 2ZS (hereinafter "Inventor(s)"), have invented certain new and useful improvements in COMPOSITIONS COMPRISING BACTERIAL STRAINS ☐ for which a United States patent application is executed on even date herewith. ☐ for which application serial number 16/713.911 was filed on December 13, 2019 in the United States Patent and Trademark Office; ☐ for which a PCT application serial number _____ was filed on ______ in the [] Receiving Office of the Patent Cooperation Treaty; ☐ for which application serial number _____ was filed on _____ in the ____ Patent Office; ☐ for which an application was filed upon which a United States Patent issued on _____ as U.S. Patent No. _____; or ☐ for which a PCT application will be filed on or before [insert 12-month date] in the [] Receiving Office of the Patent Cooperation Treaty which will claim priority to [___ (hereinafter, "Application(s)"). The term "Application(s)" also includes all patent applications that share or claim priority to or from the above application(s). WHEREAS, 4D Pharma Research Limited, a corporation incorporated under the laws of the country of Great Britain, having a place of business at Life Sciences Innovation Building, Combill Road, Aberdeen, GB AB25 2ZS, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said Application(s), and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said inventor(s) (hereinafter collectively referred to as "Inventions"), and in and to any and all patents, inventor's certificates and other forms of protection thereon granted in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, including those filed under the Paris Convention for the Protection of Industrial Property, The Patent Cooperation Treaty or otherwise (hereinafter "Patent(s)"). MOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said inventor(s) to have been received in full from said Assignee:

- 1. Said Inventor(s) do hereby sell, assign, transfer and convey into said Assignee the entire right, title and interest (a) in and to said Inventions; (b) in and to said Applications, including the right to claim priority to and from said Application(s); (c) in and to each and every application that is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); (d) in and to said Patent(s) and each and every patent issuing or reissuing from any of the foregoing; (e) in and to each and every reissue, reexamination, renewal or extension of any kind of any of the foregoing; (f) in and to each and every patent and future infringement of the Patent(s), including all rights to sue for and to receive and recover for Assignee's own use all past, present, and future lost profits, royalties, and damages of whatever nature recoverable from an infringement of the Patent(s).
- Said inventor(s) hereby coverant and agree to cooperate with said Assignee to emble said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of pertitions, onthis, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or destrable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any applications covering said Inventions; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Inventions; (d) for filing and prosecuting applications for reissuance of any said Patent(s); (e) for interference or other priority proceedings involving said Inventions; and (f) for legal proceedings involving said Inventions and any applications therefor and any Patent(s) granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that reasonable expenses incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.
- 3. The terms and covenants of this assignment shall inner to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns.
- 4. Said Inventor(s) hereby warrant, represent and covenant that said Inventor(s) have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.
- Said Inventor(s) hereby request that any Patent(s) issuing in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, be issued in the name of the Assignee, or its successors and assigns, for the sole use of said Assignee, its successors, legal 36708-727.301 Assignees for execution DOC

 Page 1 of 3

PATENT ASSIGNMENT		Docket Number 56708-727.301	
representatives and assign	5.		
6. This instrument will be interpreted and construed in accordance with the laws of the country of Great Britain, without regard to conflict of law principles. If any provision of this instrument is found to be illegal or unenforceable, the other provisions shall remain effective and enforceable to the greatest extent permitted by law. This instrument may be executed in counterparts, each of which is deemed an original, but all of which together constitute one and the same agreement. IN WITNESS WHEREOF, said Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below:			
Date: (2 F45 2.020	This bit.	Date:	Anna ETTORRE
Date: 12 Feb 2020	Sucad.	Date: 420220	P. TO STACK GL.
Date: 12fb7C20	Samantha YULLE	Date:	Joseph Roby Fringan URCIA
Date:	Helene SAVIGNAC		
RECEIVED AND AGREED TO BY ASSIGNEE: 4D Pharma Research Limited			
Date: JEBRIARY 1020 Signature: JUSON STEWNERSON Name: MEKRON N.R. STEWNERSON Title: DEGLOCK, CHIEF RIENTING OFFICER			

PATENT ASSIGNMENT

Docket Number 56708-727.301

WHEREAS, the undersigned:

- Imke Elisabeth MULDER
 c/o 4D Pharma Besearch Limited
 Life Sciences Innovation Building, Combill Road
 Aberdeen, GB AB25 2Z8
- Suaad AHMED c/o 4D Pharma Research Limited Life Sciences Innovation Building, Combill Road Aberdeen, GB AB25 2ZS
- Samantha YULLE
 Auchmill Terrace, Bucksburn
 Abordeen, GB AB21 9LF
- Helene SAVIGNAC
 clo 4D Pharma Research Limited
 Life Sciences Innovation Building, Combill Road
 Aberdeen, GB AB25 2ZS

- Annia ETTORRE
 c/o 4D Pharma Research Limited
 Life Sciences Innovation Building, Cornhill Road
 Aberdoon, GB AB25 228
- Parthern FOTIADOU
 c/o 4D Pharma Research Limited
 Life Sciences Innovation Building, Cornhill Road
 Aberdeen, GB AB25 2Z8
- Joseph Roby Iringan URCIA c/o 4D Pharma Research Limited Life Sciences Innovation Building, Cornhill Road Aberdeen, GB AB25 2ZS

(hereinafter "Inventor(s)"), have invented certain new and useful improvements in

COMPOSITIONS COMPRISING BACTERIAL STRAINS

It for which a United States patent application is executed on even date herewith;
🔯 for which application scrial number 16/713.911 was filed on <u>December 13, 2019</u> in the United States Patent and Trademark Office;
for which a PCT application serial number was filed on in the [] Receiving Office of the Patent Cooperation Treaty;
for which application serial number was filed on in the Patent Office;
for which an application was filed upon which a United States Patent issued on as U.S. Patent No; or
for which a PCT application will be filed on or before [insert 12-month date] in the [] Receiving Office of the Patent Cooperation Treat
which will claim priority to [].
(bereinafter, "Application(s)"). The term "Application(s)" also includes all patent applications that share or claim priority to or from the above
resolication (c)

WHEREAS, 4D Pharma Research Limited, a corporation incorporated under the laws of the country of Great Britain, having a place of business at Life Sciences Innovation Building, Cornhill Road, Aberdeen, GB AB25 228, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said Application(s), and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said inventor(s) (hereinafter collectively referred to as "Inventions"), and in and to any and all patents, inventor's certificates and other forms of protection thereon granted in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, including those filed under the Paris Convention for the Protection of Industrial Property. The Patent Cooperation Treaty or otherwise (hereinafter "Patent(s)").

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee:

- I. Said Inventor(s) do bereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions; (b) in and to said Applications, including the right to claim priority to and from said Application(s); (c) in and to each and every application that is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); (d) in and to said Patent(s) and each and every patent issuing or reissuing from any of the foregoing; (e) in and to each and every patent and application filed outside the United States and corresponding to any of the foregoing; and (g) in and to all claims for past, present and future infringement of the Patent(s), including all rights to suc for and to receive and recover for Assignce's own use all past, present, and future lost profits, myalties, and damages of whatever nature recoverable from an infringement of the Patent(s).
- Said inventor(s) hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any applications covering said Inventions; (c) for filing and prosecuting substitute, divisional, continuing or additional applications overing said Inventions; (d) for filing and prosecuting applications for reissuance of any said Patent(s); (e) for interference or other priority proceedings involving said Inventions; and (f) for legal proceedings involving said Inventions and any applications therefore and any Patent(s) granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that reasonable expenses incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.
- The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said inventor(s), their respective heirs, legal representatives and assigns.
- Said Inventor(s) hereby warrant, represent and covenant that said Inventor(s) have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.
- 5. Said Inventor(s) hereby request that any Patent(s) issuing in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, be issued in the name of the Assignee, or its successors and assigns, for the sole use of said Assignee, its successors, legal

56708-727.301 - Assignment for execution.DOC

Page 1 of 2

PATENT ASSIGNMENT		Docket Number 56708-727,301	
representatives and assigns. 6. This instrument will be interpreted and construed in accordance with the laws of the country of Great Britain, without regard to conflict of law principles. If any provisions shall remain effective and enforceable to of law principles. If any provision of this instrument is fraud to be illegal or unenforceable, the other provisions shall remain effective and enforceable to			
the greatest extent permitted by law. This instrument may se extended in teamerparts, end, or which is absolute the confidence of the confidence one and the cause agreement.			
IN WITNESS WHEREOF, said inversor(s) have executed and de	slivered this instrument to sai	d Assignee as of the dates written below:	
Date:	Date 25/03/2020	Anne Ettore	
Date: Susse AHMED	Diste:	Paribena FOTTATXIU	
Date: Samuntha VUILLE	Dane	Joseph Roby Iringon URCIA	
Date: Holene SAVIGNAC			
RECEIVED AND AGREED TO BY ASSIGNEE: 4D Phanna Research Limited			
Date: 1 April 2020 Signature: Manue: Alexander Streemson Title: Director, Chief Scientific Office			

PATENT ASSIGNMENT

Docket Number 56708-727.301

WHEREAS, the undersigned:

- Imke Elisabeth MULDER
 c/o 4D Pharma Research Limited
 Life Sciences Innovation Building, Cornhill Road
 Aberdeen, GB AB25 2ZS
- Suaad AHMED c/o 4D Pharma Research Limited Life Sciences Innovation Building, Cornhill Road Aberdeen, GB AB25 2ZS
- 5. Samantha YUILLE 27 Auchmill Terrace, Bucksburn Aberdeen, GB AB21 9LF
- Helene SAVIGNAC c/o 4D Pharma Research Limited Life Sciences Innovation Building, Cornhill Road Aberdeen, GB AB25 2ZS

- Anna ETTORRE
 c/o 4D Pharma Research Limited
 Life Sciences Innovation Building, Cornhill Road
 Aberdeen, GB AB25 2ZS
- Parthena FOTIADOU c/o 4D Pharma Research Limited Life Sciences Innovation Building, Cornhill Road Aberdeen, GB AB25 2ZS
- Joseph Roby Iringan URCIA c/o 4D Pharma Research Limited Life Sciences Innovation Building, Cornhill Road Aberdeen, GB AB25 2ZS

(hereinafter "Inventor(s)"), have invented certain new and useful improvements in

COMPOSITIONS COMPRISING BACTERIAL STRAINS

for which a United States patent application is executed on even date herewith;
☑ for which application serial number 16/713,911 was filed on December 13, 2019 in the United States Patent and Trademark Office;
for which a PCT application serial number was filed on in the [] Receiving Office of the Patent Cooperation Treaty;
for which application serial number was filed on in the Patent Office;
for which an application was filed upon which a United States Patent issued on, as U.S. Patent No; or
for which a PCT application will be filed on or before [insert 12-month date] in the [] Receiving Office of the Patent Cooperation Treaty
which will claim priority to [].

(hereinafter, "Application(s)"). The term "Application(s)" also includes all patent applications that share or claim priority to or from the above application(s).

WHEREAS, 4D Pharma Research Limited, a corporation incorporated under the laws of the country of Great Britain, having a place of business at Life Sciences Innovation Building, Cornhill Road, Aberdeen, GB AB25 2ZS, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said Application(s), and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said Inventor(s) (hereinafter collectively referred to as "Inventions"), and in and to any and all patents, inventor's certificates and other forms of protection thereon granted in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, including those filed under the Paris Convention for the Protection of Industrial Property, The Patent Cooperation Treaty or otherwise (hereinafter "Patent(s)").

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee:

- I. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions; (b) in and to said Applications, including the right to claim priority to and from said Application(s); (c) in and to each and every application that is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); (d) in and to said Patent(s) and each and every patent issuing or reissuing from any of the foregoing; (e) in and to each and every patent and application filed outside the United States and corresponding to any of the foregoing; and (g) in and to all claims for past, present and future infringement of the Patent(s), including all rights to sue for and to receive and recover for Assignee's own use all past, present, and future lost profits, royalties, and damages of whatever nature recoverable from an infringement of the Patent(s).
- 2. Said Inventor(s) hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any applications covering said Inventions; (c) for filing and prosecuting prosecuting and prosecuting applications for reissuance of any said Patent(s); (e) for interference or other priority proceedings involving said Inventions; and (f) for legal proceedings involving said Inventions and any applications therefor and any Patent(s) granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that reasonable expenses incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.
- 3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns.
- 4. Said Inventor(s) hereby warrant, represent and covenant that said Inventor(s) have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.
- 5. Said Inventor(s) hereby request that any Patent(s) issuing in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, be issued in the name of the Assignee, or its successors and assigns, for the sole use of said Assignee, its successors, legal

56708-727.301 - Assignment for execution.DOC

Page 1 of 2

	PATENT ASSIGNMENT		Docket Number 56708-727.301
representatives and assigns.			
6. This instrument will be interpreted and construed in accordance with the laws of the country of Great Britain, without regard to conflict of law principles. If any provision of this instrument is found to be illegal or unenforceable, the other provisions shall remain effective and enforceable to the greatest extent permitted by law. This instrument may be executed in counterparts, each of which is deemed an original, but all of which together constitute one and the same agreement. IN WITNESS WHEREOF, said Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below:			
Date:	Imke Elisabeth MULDER	Date:	Anna ETTORRE
Date:	Suaad AHMED	Date:	Parthena FOTIADOU
Date:	Samantha YUILLE	Date:	Joseph Roby Iringan URCIA
Date: <u>()2 05.70</u>	- Q10-		verpu recey uniqui orea.
RECEIVED AND AGREED TO BY ASSIGNEE: 4D Pharma Research Limited			
Date: 7 MAY'20 Signature: J J Name: Title;			

PATENT ASSIGNMENT	Docket Number 56708-727.301		
WHEREAS, the undersigned:	nna ETTORRE		
I. Imke Elisabeth MULDER c/o 4D Pharma Research Limited Li	o 4D Pharma Rescarch Limited ite Sciences Innovation Building, Cornhill Road berdeen, GB AB25 2ZS		
3. Suaad AHMED c/o 4D Pharma Research Limited L	arthena FOTIADOU /o 4D Pharma Research Limited ife Sciences Innovation Building, Cornhill Road berdeen, GB AB25 2ZS		
27 Auchmill Terrace, Bucksburn Aberdeen GR AB21 91.F	oseph Roby Iringan URCIA /o 4D Pharma Research Limited ife Sciences Innovation Building, Comhill Road berdeen, GB AB25 2ZS		
7. Helene SAVIGNAC c/o 4D Pharma Research Limited Life Sciences Innovation Building, Cornhill Road Aberdeen, GB AB25 2ZS			
(hereinafter "Inventor(s)"), have invented certain new and useful improvements in			
COMPOSITIONS COMPRISING BAC			
☐ for which a United States patent application is executed on even date herev ☐ for which application serial number 16.713.911 was filed on December 13. ☐ for which a PCT application serial number was filed on in the ☐ for which application serial number was filed on in the ☐ for which an application was filed upon which a United States Patent issue ☐ for which a PCT application will be filed on or before [insert 12-month dat which will claim priority to [].	, 2019 in the United States Patent and Trademark Office; [] Receiving Office of the Patent Cooperation Treaty; [Patent Office; d onas U.S. Patent No; or		
(hereinafter, "Application(s)"). The term "Application(s)" also includes all patent applications that share or claim priority to or from the above application(s).			
WHEREAS, 4D Pharma Research Limited, a corporation incorporated under the laws of the country of Great Britain, having a place of business at Life Sciences Innovation Building, Cornhill Road, Aberdeen, GB AB25 2ZS, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said Application(s), and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said inventor(s) (hereinafter collectively referred to as "Inventions"), and in and to any and all patents, inventor's certificates and other forms of protection thereon granted in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, including those filed under the Paris Convention for the Protection of Industrial Property, The Patent Cooperation Treaty or otherwise (hereinafter "Patent(s)").			
NOW, THEREFORE, in consideration of good and valuable consideration ack said Assignce:	snowledged by said Inventor(s) to have been received in full from		
1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions; (b) in and to said Applications, including the right to claim priority to and from said Application(s); (c) in and to each and every application that is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); (d) in and to said Patent(s) and each and every patent issuing or reissuing from any of the foregoing; (e) in and to each and every reissue, reexamination, renewal or extension of any kind of any of the foregoing; (f) in and to each and every patent and application filed outside the United States and corresponding to any of the foregoing; and (g) in and to all claims for past, present and future infringement of the Patent(s), including all rights to sue for and to receive and recover for Assignee's own use all past, present, and future lost profits, royaltics, and damages of whatever nature recoverable from an infringement of the Patent(s).			
2. Said Inventor(s) hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of pertinent, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any applications covering said Inventions; (c) for filing and prosecuting applications for reissuance of any said Palent(s); (e) for interference or other priority proceedings involving said Inventions; and (f) for legal proceedings involving said Inventions and any applications (therefor and any Patent(s) granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that reasonable expenses incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.			
3. The terms and covenants of this assignment shall inure to the benef representatives, and shall be binding upon said inventor(s), their respective heirs, legal re	epresentatives and assigns.		
4. Said Inventor(s) hereby warrant, represent and covenant that said Is contract, or understanding in conflict herewith.			
5. Said Inventor(s) hereby request that any Patent(s) issuing in the Unagreement, protocol, or treaty, be issued in the name of the Assignee, or its successors at 56708-727,301 - Assignment for execution DOC Page 1 of 2	uited States, foreign countries, or under any international convention, and assigns, for the sole use of said Assignce, its successors, legal		

REEL: 054497 FRAME: 0459

PATENT ASSIGNMENT			Docket Number 56708-727.301
representatives and assigns. 6. This instrument will be interpreted and construed in accordance with the laws of the country of Great Britain, without regard to conflict of law principles. If any provision of this instrument is found to be illegal or unenforceable, the other provisions shall remain effective and enforceable to the greatest extent permitted by law. This instrument may be executed in counterparts, each of which is deemed an original, but all of which together constitute one and the same agreement. IN WITNESS WHEREOF, said Inventor(s) have executed and delivered this instrument to said Assignce as of the dates written below:			
Date:	Imke Elisabeth MULDER	Date:	Anna ETTORRE
Date:	Suaad AHMED	Date: 28 M4/10 2010_	Parthena FOTIADOU
Date:	Samantha YUILLE		Joseph Roby Iringan URCIA
Date:	Helene SAVIGNAC		
RECEIVED AND AGREED TO BY ASSIGNEE: 4D Pharma Research Limited Date: 22 April 2020 Signature: Name: Alexander Stevenson Title: Director, Chief Scientific Officer			

RECORDED: 11/21/2020

REEL: 054497 FRAME: 0460