506284037 10/01/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6330785

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DR. JASON TINLEY	12/21/2017
KEVIN D. CHAPPUIS	12/14/2017
DR. CHRISTOPHER L. JONES	12/14/2017
LUCAS DIEHL	12/14/2017
IAN HELMAR	12/14/2017
JOHN SULLIVAN	12/14/2017

RECEIVING PARTY DATA

Name:	HD LIFESCIENCES LLC
Street Address:	38 MONTVALE AVENUE
Internal Address:	SUITE 380
City:	STONEHAM
State/Country:	MASSACHUSETTS
Postal Code:	02180

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16917685

CORRESPONDENCE DATA

Fax Number: (617)217-4699

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: 617-217-4700

Email: irene.gommerstadt@nelsonmullins.com,

ipboston.docketing@nelsonmullins.com

Correspondent Name: NELSON MULLINS RILEY & SCARBOROUGH LLP

Address Line 1: ONE POST OFFICE SQUARE

Address Line 2: 30TH FLOOR

Address Line 4: BOSTON, MASSACHUSETTS 02109

ATTORNEY DOCKET NUMBER:	HDM-017CDV
NAME OF SUBMITTER:	REZA MOLLAAGHABABA
SIGNATURE:	/Reza Mollaaghababa/

DATE SIGNED:	10/01/2020	
Total Attachments: 12		
source=Assignment HDM-017CDV#pag	e1.tif	
source=Assignment HDM-017CDV#pag	e2.tif	
source=Assignment HDM-017CDV#pag	e3.tif	
source=Assignment HDM-017CDV#pag	e4.tif	
source=Assignment HDM-017CDV#page5.tif		
source=Assignment HDM-017CDV#pag	e6.tif	
source=Assignment HDM-017CDV#page7.tif		
source=Assignment HDM-017CDV#pag	e8.tif	
source=Assignment HDM-017CDV#pag	e9.tif	
source=Assignment HDM-017CDV#pag	e10.tif	
source=Assignment HDM-017CDV#pag	e11.tif	
source=Assignment HDM-017CDV#pag	e12.tif	

Whereas, Dr. Jason Tinley, hereinafter called assignor, is a joint inventor of the following:

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201741NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/876,695) the filing date and application number of said application when known.

ANISOTROPIC BIOCOMPATIBLE LATTICE STRUCTURE

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201742NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/876, 793) the filing date and application number of said application when known.

METHODS OF DESIGNING THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201744NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (%/22/2014, 15/876, 903) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201745NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/877, 002.) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a Patent Cooperation Treaty Application, attorney docket number HL201746PCT, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, PCT/USI 8/14720) the filing date and application number of said application when known.

Whereas, HD LifeSciences LLC, a Massachusetts LLC, hereinafter called assignee, desires to acquire assignor's entire right, title, and interest in the applications and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for One Dollar (\$1.00) and other valuable consideration, receipt whereof is hereby acknowledged.

	Signed and sealed
	Dr. Jason Finley (Seal) Date: 12(2 17
	[to be completed by notary public]
C,	On this day of d
	TIFFANY KING Notary Public, State of Texas Comm. Expires 04-09-2020 Notary ID 12485731-6

<u>ASSIGNMENT</u>

Whereas, Kevin Chappuis, hereinafter called assignor, is a joint inventor of the following:

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201741NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/876,695) the filing date and application number of said application when known.

ANISOTROPIC BIOCOMPATIBLE LATTICE STRUCTURE

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201742NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2015, 15/876, 793) the filing date and application number of said application when known.

METHODS OF DESIGNING THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201744NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (の1/22/2018 , ほ/876, 903) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201745NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/877, 002) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

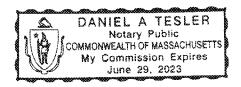
for which a Patent Cooperation Treaty Application, attorney docket number HL201746PCT, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (ロルアンドルコンド/ロコンド) the filing date and application number of said application when known.

Whereas, HD LifeSciences LLC, a Massachusetts LLC, hereinafter called assignee, desires to acquire assignor's entire right, title, and interest in the applications and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for One Dollar (\$1.00) and other valuable consideration, receipt whereof is hereby acknowledged.

Signed and sealed				
Millian	(Seal)	Date:	12/14/17	
Kevin Chappuis				
[to be completed by notary public]				
On this 14 Ha day of Dec. 2017, before m	e, Daniel	Tesler	the	undersigned
Notary Public, personally appeared Key	in chapp	wis	ASSIGNO	R, personally
known to me (or proved to me on the basis				
name is subscribed to the within instrumen	t, and acknowl	edged to	me that he exec	cuted the same
WITNESS my hand and official seal in \$\mathcal{V}\$	hiddlesex (County of	MA	on the date
set forth in this certificate.				
Notary Public				
(Legalization- notarization not required for recording bu	t is prima facie evid	lence of exec	cution under 35 U.S.	C. 261)



<u>ASSIGNMENT</u>

Whereas, Dr. Christopher L. Jones, hereinafter called assignor, is a joint inventor of the following:

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201741NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (51/22/2018, 15/876,695) the filing date and application number of said application when known.

ANISOTROPIC BIOCOMPATIBLE LATTICE STRUCTURE

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201742NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (of 122120) , 15/876,793) the filing date and application number of said application when known.

METHODS OF DESIGNING THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201744NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/876, 903) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201745NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/877,002) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

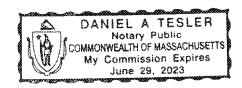
for which a Patent Cooperation Treaty Application, attorney docket number HL201746PCT, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (かたえだる) (ペンパンので、ペンパンのでは、アンのでは、アンので

Whereas, HD LifeSciences LLC, a Massachusetts LLC, hereinafter called assignee, desires to acquire assignor's entire right, title, and interest in the applications and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for One Dollar (\$1.00) and other valuable consideration, receipt whereof is hereby acknowledged.

Signed and sealed //
(Seal) Date: 2017/11/14
Dr. Christopher L. Jones
[to be completed by notary public]
On this 14th day of Dec. 2017, before me, Doxiel Tester, the undersigned
Notary Public, personally appeared Dr. Christopher Jones ASSIGNOR, personally
known to me (or proved to me on the basis of satisfactory evidence) to be the person whose
name is subscribed to the within instrument, and acknowledged to me that he executed the same
WITNESS my hand and official seal in Middlesex County of MA on the date
set forth in this certificate.
Notary Public
(Legalization-notarization not required for recording but is prima facie evidence of execution under 35 U.S.C. 261)



Whereas, John Sullivan, hereinafter called assignor, is a joint inventor of the following:

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201741NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/876,695) the filing date and application number of said application when known.

ANISOTROPIC BIOCOMPATIBLE LATTICE STRUCTURE

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201742NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/876, 793) the filing date and application number of said application when known.

METHODS OF DESIGNING THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201744NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/576,903) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201745NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (or 122/2018, 15/877, 002) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

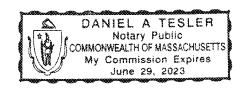
for which a Patent Cooperation Treaty Application, attorney docket number HL201746PCT, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/12/2018, PCT/LS18/1472D) the filing date and application number of said application when known.

Whereas, HD LifeSciences LLC, a Massachusetts LLC, hereinafter called assignee, desires to acquire assignor's entire right, title, and interest in the applications and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for One Dollar (\$1.00) and other valuable consideration, receipt whereof is hereby acknowledged.

Signed and sealed				
A SIL	(Seal)	Date:	12/14/15	7
John Sullivan				
[to be completed by notary public]				
On this 1414 day of Dec. 2017, before me,	Daniel	Tesler	, the	e undersigned
Notary Public, personally appeared _ John	. Sullive	W	ASSIGN	OR, personally
known to me (or proved to me on the basis of	satisfactory	evidence) to	be the per	rson whose
name is subscribed to the within instrument, a	and acknowle	edged to me	that he ex	ecuted the same.
WITNESS my hand and official seal in Wit				on the date
set forth in this certificate.				
Notary Public				
(Legalization notarization not required for recording but is	nrima facia avid	ance of executio	n under 35 II	S C 261)



Whereas, Lucas Diehl, hereinafter called assignor, is a joint inventor of the following:

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201741NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/876, 695) the filing date and application number of said application when known.

ANISOTROPIC BIOCOMPATIBLE LATTICE STRUCTURE

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201742NP, will be filed; and

METHODS OF DESIGNING THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201744NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/876, 903) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201745NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/2018, 15/877,002) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

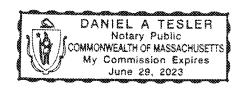
for which a Patent Cooperation Treaty Application, attorney docket number HL201746PCT, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, ACT/USIS/14720) the filing date and application number of said application when known.

Whereas, HD LifeSciences LLC, a Massachusetts LLC, hereinafter called assignee, desires to acquire assignor's entire right, title, and interest in the applications and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for One Dollar (\$1.00) and other valuable consideration, receipt whereof is hereby acknowledged.

Signed and sealed				
4841	(Seal)	Date:/?_	/14/20	17
Lucas Diehl		/	7	
[to be completed by notary public]				
On this MAN day of Dec 2017, before me, Notary Public, personally appeared Lucas	Daniel	Tesler	, the	e undersigned
Notary Public, personally appeared Lucas	Diekl		ASSIGN	OR, personally
known to me (or proved to me on the basis of	satisfactory	evidence) to	be the per	rson whose
name is subscribed to the within instrument, as	nd acknowl	edged to me t	hat he exc	ecuted the same
WITNESS my hand and official seal in Midd	ilesex (County of	MA	on the date
set forth in this certificate.				
Notary Public				
A englization- notarization not required for recording but is n	rima facie evid	lence of execution	under 35 III	S.C. 261)



Whereas, Ian Helmar, hereinafter called assignor, is a joint inventor of the following:

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201741NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/876,695) the filing date and application number of said application when known.

ANISOTROPIC BIOCOMPATIBLE LATTICE STRUCTURE

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201742NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01/22/2018, 15/876, 793) the filing date and application number of said application when known.

METHODS OF DESIGNING THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201744NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (\$122/2018, 15/876,903) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a U.S. Nonprovisional Utility Patent Application, attorney docket number HL201745NP, will be filed; and

I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (01722/2018, 15/877,002) the filing date and application number of said application when known.

THREE-DIMENSIONAL LATTICE STRUCTURES FOR IMPLANTS

for which a Patent Cooperation Treaty Application, attorney docket number HL201746PCT, will be filed; and

Helmar Assignment Page 2 of 2

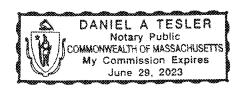
I hereby authorize and request attorney Daniel Akira Tesler, of 137 Cabot Street, Beverly, MA 01915, to insert here in parentheses (ついって/こうで 、そこではいいしょう) the filing date and application number of said application when known.

Whereas, HD LifeSciences LLC, a Massachusetts LLC, hereinafter called assignee, desires to acquire assignor's entire right, title, and interest in the applications and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for One Dollar (\$1.00) and other valuable consideration, receipt whereof is hereby acknowledged.

The above named assignor does hereby sell, assign, and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the applications, any continuations, continuations-in-part, divisional or other applications (foreign and domestic) claiming priority from the application; and further does hereby sell, assign, and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the invention disclosed therein for the United States of America and all countries foreign thereto, including rights of priority under the International Convention of Paris (1883) as amended; and hereby requests the Commissioner of Patents to issue any Letters Patent granted upon the invention set forth in the application or any of the applications named above to the assignee, its successors and assigns; and hereby agrees that the assignee may apply for foreign Letters Patent on the invention and assignor will execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee.

Signed and sealed	
(Seal) Date: 12/14/2017	
An Helmar	
[to be completed by notary public]	
On this MH day of Dec. 2017, before me, Daniel Tester, the undersign	gned
Notary Public, personally appeared ICM Helman ASSIGNOR, personally	onally
known to me (or proved to me on the basis of satisfactory evidence) to be the person whose	se
name is subscribed to the within instrument, and acknowledged to me that he executed the	
WITNESS my hand and official seal in MiddleSex County of MA on the	ne date
set forth in this certificate	
Notary Public	
(Legalization- notarization not required for recording but is prima facie evidence of execution under 35 U.S.C. 261)	



PATENT REEL: 053948 FRAME: 0757

RECORDED: 10/01/2020