508026796 07/24/2023

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT8073947

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JAMES L. RILEY	08/22/2005
CARL H. JUNE	08/25/2005
ROBERT H. VONDERHEIDE	09/16/2005
NICOLE AQUI	08/19/2005
MEGAN M. SUHOSKI	08/19/2005

RECEIVING PARTY DATA

Name:	THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA
Street Address:	3600 CIVIC CENTER BOULEVARD, 9TH FLOOR
City:	PHILADELPHIA
State/Country:	PENNSYLVANIA
Postal Code:	19104

PROPERTY NUMBERS Total: 4

Property Type	Number
Application Number:	12796445
Application Number:	14247298
Application Number:	15387199
Application Number:	16376648

CORRESPONDENCE DATA

(717)257-7580 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: 610-251-5786

Email: IPGroupMailbox@saul.com, lisa.sapovits@saul.com LISA SAPOVITS, SAUL EWING ARNSTEIN & LEHR LLP **Correspondent Name:**

Address Line 1: **CENTRE SQUARE WEST**

Address Line 2: 1500 MARKET STREET, 38TH FLOOR Address Line 4: PHILADELPHIA, PENNSYLVANIA 19102

ATTORNEY DOCKET NUMBER:	046483-5054US2 THRU US5
NAME OF SUBMITTER:	LISA R. SAPOVITS
SIGNATURE:	/Lisa R. Sapovits/

DATE SIGNED:	07/24/2023
Total Attachments: 16	
source=Penn Q3362 Assignment 11137	'807#page1.tif
source=Penn Q3362 Assignment 11137	'807#page2.tif
source=Penn Q3362 Assignment 11137	'807#page3.tif
source=Penn Q3362 Assignment 11137	'807#page4.tif
source=Penn Q3362 Assignment 11137	'807#page5.tif
source=Penn Q3362 Assignment 11137	'807#page6.tif
source=Penn Q3362 Assignment 11137	'807#page7.tif
source=Penn Q3362 Assignment 11137	'807#page8.tif
source=Penn Q3362 Assignment 11137	'807#page9.tif
source=Penn Q3362 Assignment 11137	'807#page10.tif
source=Penn Q3362 Assignment 11137	'807#page11.tif
source=Penn Q3362 Assignment 11137	'807#page12.tif
source=Penn Q3362 Assignment 11137	'807#page13.tif
source=Penn Q3362 Assignment 11137	'807#page14.tif
source=Penn Q3362 Assignment 11137	'807#page15.tif
source=Penn Q3362 Assignment 11137	'807#page16.tif

WHEREAS, We, James L. Riley, Carl H. June, Robert H. Vonderheide, Nicole Aqui and Megan M. Suhoski, with respective post office addresses of 435 Creekside Drive, Downingtown, Pennsylvania 19335, 409 Baird Road, Merion Station, Pennsylvania 19066-1416, 518 Lafayette Road, Merion Station, Pennsylvania 19066, 2713 North 45th Street, Philadelphia, Pennsylvania 19131, 5176 Nuangola Road, Nuangola, Pennsylvania 18707, citizens of the United States of America, hereinafter generally referred to as "ASSIGNORS," have invented a certain new and useful

NOVEL ARTIFICIAL ANTIGEN PRESENTING CELLS AND USES THEREFOR

for which I have executed a United States patent application, Application No.: 11/137,807, filed May 25, 2005, and

ASSIGNORS authorize ASSIGNEE or ASSIGNEE's representative to insert the Application Number and Filing Date of this application if they are unknown at the time of execution of this Assignment.

WHEREAS, The Trustees of the University of Pennsylvania, with a principal place of business at 3160 Chestnut Street, Suite 200, Philadelphia, Pennsylvania 19104-6283, hereinafter generally referred to as "ASSIGNEE", is desirous of acquiring said invention and said patent application.

NOW, THEREFORE, in consideration of the sum of One Dollar and other good and valuable executed consideration, the full receipt and sufficiency of all of which are hereby acknowledged and intending to be legally bound hereby, we, the undersigned ASSIGNORS, hereby agree to sell, assign, transfer and convey and by these presents do sell, assign, transfer and convey unto the above-named ASSIGNEE, the whole and entire right, title and interest

in and to said invention as described in the above patent application, for the territory of the United States and its possessions and territories and all foreign countries;

in and to the above patent application and any and all related United States and foreign patent applications disclosing said invention, including provisionals, non-provisionals, divisions and continuations thereof, along with all rights of priority created by said patent application under any treaty relating thereto; and

in and to all United States and foreign patents which may be granted on any and all of said patent applications, including extensions, reissues and reexamination certificates thereof;

said invention, application(s) and patent(s) to be held and enjoyed by the above-named ASSIGNEE, for ASSIGNEE's own use and benefit, and for ASSIGNEE's legal representatives and assigns to the full end of the term or terms for which said patent(s) may be granted, as fully and entirely as the

PHIP\425858\1 1

same would have been held by the undersigned ASSIGNORS had this assignment and sale not been made; and for the aforesaid consideration ASSIGNORS hereby covenant, agree and undertake to execute, whenever requested by the above-named ASSIGNEE, all patent applications, assignments, lawful oaths and any other papers which ASSIGNEE may deem necessary or desirable for securing to ASSIGNEE or for maintaining for ASSIGNEE all the patent(s) hereby assigned or agreed to be assigned; all without further compensation to the undersigned ASSIGNORS.

22AU,05	Jan 2 dex	(Seal)
Date O	James L. Riley	` '
\circ		

STATE OF Yenna : ss

Before me, a notary public in and for the State and County aforesaid, on this 2005 day of 1005, personally appeared James L. Riley, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his/her free deed and act, signed, sealed and delivered by his/her for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

Notary Public

My Commission Expires: Nov. 10, 2005

Notarial Scal
Chrystal Mackey, Notary Public
Caln Twp., Chester County
My Commission Expires Nov. 10, 2005

Member, Pennsylvania Association of Notaries

		(Seal)
Date	Carl H. June	(Seal)
STATE OF		
COUNTY OF	: ss. :	
of, 2003 known, and who having first me first duly sworn, did ac signed, sealed and delivered	public in and for the State and County aforesaid, on this	ne personally have been by deed and act,
	Notary Public My Commission Expires:	
Date	Robert H. Vonderheide	(Seal)
STATE OF	: ss.	
of, 200s personally known, and who have been by me first duly s and act, signed, sealed and of	oublic in and for the State and County aforesaid, on this	presence and her free deed
	Notary Public My Commission Expires:	

		(Seal)
Date	Nicole Aqui	
STATE OF	 :	
COUNTY OF	: ss. :	
of, 2005, known, and who having first exme first duly sworn, did ackn	personally appeared Nicole Aqui , who being to mecuted the foregoing instrument in my presence and nowledge the foregoing instrument as his/her free dy his/her for the purpose therein stated and intending nat said instrument be recorded.	ne personally have been by leed and act,
_	Notary Public My Commission Expires:	
Date	Megan M. Suhoski	(Seal)
	3	
STATE OF	: : ss.	
COUNTY OF		
personally known, and who have been by me first duly swo and act, signed, sealed and deli	personally appeared Megan M. Suhoski , who be aving first executed the foregoing instrument in my porn, did acknowledge the foregoing instrument as his/livered by his/her for the purpose therein stated and intending that said instrument be recorded.	presence and her free deed
_	Notary Public My Commission Expires:	

WHEREAS, We, James L. Riley, Carl H. June, Robert H. Vonderheide, Nicole Aqui and Megan M. Suhoski, with respective post office addresses of 435 Creekside Drive, Downingtown, Pennsylvania 19335, 409 Baird Road, Merion Station, Pennsylvania 19066-1416, 518 Lafayette Road, Merion Station, Pennsylvania 19066, 2713 North 45th Street, Philadelphia, Pennsylvania 19131, 5176 Nuangola Road, Nuangola, Pennsylvania 18707, citizens of the United States of America, hereinafter generally referred to as "ASSIGNORS," have invented a certain new and useful

NOVEL ARTIFICIAL ANTIGEN PRESENTING CELLS AND USES THEREFOR

for which I have executed a United States patent application, Application No.: 11/137,807, filed May 25, 2005, and

ASSIGNORS authorize ASSIGNEE or ASSIGNEE's representative to insert the Application Number and Filing Date of this application if they are unknown at the time of execution of this Assignment.

WHEREAS, The Trustees of the University of Pennsylvania, with a principal place of business at 3160 Chestnut Street, Suite 200, Philadelphia, Pennsylvania 19104-6283, hereinafter generally referred to as "ASSIGNEE", is desirous of acquiring said invention and said patent application.

NOW, THEREFORE, in consideration of the sum of One Dollar and other good and valuable executed consideration, the full receipt and sufficiency of all of which are hereby acknowledged and intending to be legally bound hereby, we, the undersigned ASSIGNORS, hereby agree to sell, assign, transfer and convey and by these presents do sell, assign, transfer and convey unto the above-named ASSIGNEE, the whole and entire right, title and interest

in and to said invention as described in the above patent application, for the territory of the United States and its possessions and territories and all foreign countries;

in and to the above patent application and any and all related United States and foreign patent applications disclosing said invention, including provisionals, non-provisionals, divisions and continuations thereof, along with all rights of priority created by said patent application under any treaty relating thereto; and

in and to all United States and foreign patents which may be granted on any and all of said patent applications, including extensions, reissues and reexamination certificates thereof;

said invention, application(s) and patent(s) to be held and enjoyed by the above-named ASSIGNEE, for ASSIGNEE's own use and benefit, and for ASSIGNEE's legal representatives and assigns to the full end of the term or terms for which said patent(s) may be granted, as fully and entirely as the

PHIP\425858\1 1

same would have been held by the undersigned ASSIGNORS had this assignment and sale not been made; and for the aforesaid consideration ASSIGNORS hereby covenant, agree and undertake to execute, whenever requested by the above-named ASSIGNEE, all patent applications, assignments, lawful oaths and any other papers which ASSIGNEE may deem necessary or desirable for securing to ASSIGNEE or for maintaining for ASSIGNEE all the patent(s) hereby assigned or agreed to be assigned; all without further compensation to the undersigned ASSIGNORS. (Seal) James L. Riley Date $\mathbf{STATE} \mathbf{OF}_{-}$ COUNTY OF Before me, a notary public in and for the State and County aforesaid, on this _____ day _____, 2005, personally appeared James L. Riley, who being to me personally of known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his/her free deed and act, signed, sealed and delivered by his/her for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded. Notary Public

My Commission Expires:

2

111

PHIP\425858\1

	a . N	
25 Ang Of	Couldte	(Seal)
Date	Carl H. June	
COUNTY OF Montaner	: : ss.) :	
of	lic in and for the State and County aforesaid, on this personally appeared Carl H. June, who being to me secuted the foregoing instrument in my presence and sowledge the foregoing instrument as his/her free day his/her for the purpose therein stated and intending at said instrument be recorded. Notary Public My Commission Expires: 24 / 64/ 0	ne personally have been by leed and act, to be legally
Date	Robert H. Vonderheide	(Seal)
STATE OF	: : ss.	
COUNTY OF	:	
of, 2005, personally known, and who had have been by me first duly swo and act, signed, sealed and deli	lic in and for the State and County aforesaid, on thispersonally appeared Robert H. Vonderheide, who aving first executed the foregoing instrument in my porn, did acknowledge the foregoing instrument as his/livered by his/her for the purpose therein stated and introduing that said instrument be recorded.	being to me presence and her free deed
_	Notary Public My Commission Expires:	

PATENT

		(Seal)
Date	Nicole Aqui	` ,
STATE OF	: : ss.	
COUNTY OF	:	
of, 200 known, and who having first me first duly sworn, did a signed, sealed and delivered	public in and for the State and County aforesaid, on this05, personally appeared Nicole Aqui , who being to rest executed the foregoing instrument in my presence and acknowledge the foregoing instrument as his/her freed by his/her for the purpose therein stated and intending that said instrument be recorded.	ne personally have been by deed and act,
	Notary Public My Commission Expires:	(Seal)
Date	Megan M. Suhoski	(Dour)
STATE OF	: ss.	
of, 200 personally known, and who have been by me first duly and act, signed, sealed and	public in and for the State and County aforesaid, on this05, personally appeared Megan M. Suhoski, who o having first executed the foregoing instrument in my sworn, did acknowledge the foregoing instrument as his delivered by his/her for the purpose therein stated and in ntending that said instrument be recorded.	presence and her free deed
	Notary Public My Commission Expires:	

WHEREAS, We, James L. Riley, Carl H. June, Robert H. Vonderheide, Nicole Aqui and Megan M. Suhoski, with respective post office addresses of 435 Creekside Drive, Downingtown, Pennsylvania 19335, 409 Baird Road, Merion Station, Pennsylvania 19066-1416, 518 Lafayette Road, Merion Station, Pennsylvania 19066, 2713 North 45th Street, Philadelphia, Pennsylvania 19131, 5176 Nuangola Road, Nuangola, Pennsylvania 18707, citizens of the United States of America, hereinafter generally referred to as "ASSIGNORS," have invented a certain new and useful

NOVEL ARTIFICIAL ANTIGEN PRESENTING CELLS AND USES THEREFOR

for which I have executed a United States patent application, Application No.: 11/137,807, filed May 25, 2005, and

ASSIGNORS authorize ASSIGNEE or ASSIGNEE's representative to insert the Application Number and Filing Date of this application if they are unknown at the time of execution of this Assignment.

WHEREAS, The Trustees of the University of Pennsylvania, with a principal place of business at 3160 Chestnut Street, Suite 200, Philadelphia, Pennsylvania 19104-6283, hereinafter generally referred to as "ASSIGNEE", is desirous of acquiring said invention and said patent application.

NOW, THEREFORE, in consideration of the sum of One Dollar and other good and valuable executed consideration, the full receipt and sufficiency of all of which are hereby acknowledged and intending to be legally bound hereby, we, the undersigned ASSIGNORS, hereby agree to sell, assign, transfer and convey and by these presents do sell, assign, transfer and convey unto the above-named ASSIGNEE, the whole and entire right, title and interest

in and to said invention as described in the above patent application, for the territory of the United States and its possessions and territories and all foreign countries:

in and to the above patent application and any and all related United States and foreign patent applications disclosing said invention, including provisionals, non-provisionals, divisions and continuations thereof, along with all rights of priority created by said patent application under any treaty relating thereto; and

in and to all United States and foreign patents which may be granted on any and all of said patent applications, including extensions, reissues and reexamination certificates thereof;

said invention, application(s) and patent(s) to be held and enjoyed by the above-named ASSIGNEE, for ASSIGNEE's own use and benefit, and for ASSIGNEE's legal representatives and assigns to the full end of the term or terms for which said patent(s) may be granted, as fully and entirely as the

, I

PHIP\425858\1 1

same would have been held by the undersigned ASSIGNORS had this assignment and sale not been made; and for the aforesaid consideration ASSIGNORS hereby covenant, agree and undertake to execute, whenever requested by the above-named ASSIGNEE, all patent applications, assignments, lawful oaths and any other papers which ASSIGNEE may deem necessary or desirable for securing to ASSIGNEE or for maintaining for ASSIGNEE all the patent(s) hereby assigned or agreed to be assigned; all without further compensation to the undersigned ASSIGNORS. (Seal) Date James L. Riley STATE OF __ COUNTY OF Before me, a notary public in and for the State and County aforesaid, on this _____ day of _____, 2005, personally appeared James L. Riley, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his/her free deed and act, signed, sealed and delivered by his/her for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

> **Notary Public** My Commission Expires:

> > Term.

2

PHIP\425858\1

		(O -1)
Date	Carl H. June	(Seal)
STATE OF	: : ss. :	
of, 2005 known, and who having first me first duly sworn, did ac signed, sealed and delivered	blic in and for the State and County aforesaid, on this, personally appeared Carl H. June, who being to me executed the foregoing instrument in my presence and has knowledge the foregoing instrument as his/her free dee by his/her for the purpose therein stated and intending to that said instrument be recorded.	personally ve been by d and act,
9/16/05 Date	Notary Public My Commission Expires: Robert H. Vonderheide	(Seal)
STATE OF AONTS ON	·: : ss. 1ery_:	
of <u>September</u> , 2005 personally known, and who have been by me first duly sy and act, signed, sealed and de	ablic in and for the State and County aforesaid, on this	ing to me esence and r free deed
	Notary Public My Commission Expires:	

NOTARIAL SEAL
MARGARET SIMPSON, Notary Public
Lower Merion Twp . Montgomery County
My Commission Expires April 2, 2006

PHIP\425858\1

		(Seal)
Date	Nicole Aqui	(Geni)
STATE OF	:	
COUNTY OF	: ss. :	
of, 2005 known, and who having first me first duly sworn, did ac signed, sealed and delivered	ablic in and for the State and County aforesaid, on this personally appeared Nicole Aqui, who being to executed the foregoing instrument in my presence an knowledge the foregoing instrument as his/her free by his/her for the purpose therein stated and intending that said instrument be recorded.	me personally d have been by deed and act,
	Notary Public My Commission Expires:	
Date	Megan M. Suhoski	(Seal)
STATE OF	:	
COUNTY OF	: ss. :	
of, 2005 personally known, and who have been by me first duly sy and act, signed, sealed and do	ublic in and for the State and County aforesaid, on this 5, personally appeared Megan M. Suhoski, who having first executed the foregoing instrument in my worn, did acknowledge the foregoing instrument as hi elivered by his/her for the purpose therein stated and tending that said instrument be recorded.	being to me y presence and s/her free deed
	Notary Public My Commission Expires:	•
	May Commission Expires.	

PATENT REEL: 064359 FRAME: 0456

17

4

WHEREAS, We, James L. Riley, Carl H. June, Robert H. Vonderheide, Nicole Aqui and Megan M. Suhoski, with respective post office addresses of 435 Creekside Drive, Downingtown, Pennsylvania 19335, 409 Baird Road, Merion Station, Pennsylvania 19066-1416, 518 Lafayette Road, Merion Station, Pennsylvania 19066, 2713 North 45th Street, Philadelphia, Pennsylvania 19131, 5176 Nuangola Road, Nuangola, Pennsylvania 18707, citizens of the United States of America, hereinafter generally referred to as "ASSIGNORS," have invented a certain new and useful

NOVEL ARTIFICIAL ANTIGEN PRESENTING CELLS AND USES THEREFOR

for which I have executed a United States patent application, Application No.: 11/137,807, filed May 25, 2005, and

ASSIGNORS authorize ASSIGNEE or ASSIGNEE's representative to insert the Application Number and Filing Date of this application if they are unknown at the time of execution of this Assignment.

WHEREAS, The Trustees of the University of Pennsylvania, with a principal place of business at 3160 Chestnut Street, Suite 200, Philadelphia, Pennsylvania 19104-6283, hereinafter generally referred to as "ASSIGNEE", is desirous of acquiring said invention and said patent application.

NOW, THEREFORE, in consideration of the sum of One Dollar and other good and valuable executed consideration, the full receipt and sufficiency of all of which are hereby acknowledged and intending to be legally bound hereby, we, the undersigned ASSIGNORS, hereby agree to sell, assign, transfer and convey and by these presents do sell, assign, transfer and convey unto the above-named ASSIGNEE, the whole and entire right, title and interest

in and to said invention as described in the above patent application, for the territory of the United States and its possessions and territories and all foreign countries:

in and to the above patent application and any and all related United States and foreign patent applications disclosing said invention, including provisionals, non-provisionals, divisions and continuations thereof, along with all rights of priority created by said patent application under any treaty relating thereto; and

in and to all United States and foreign patents which may be granted on any and all of said patent applications, including extensions, reissues and reexamination certificates thereof;

said invention, application(s) and patent(s) to be held and enjoyed by the above-named ASSIGNEE, for ASSIGNEE's own use and benefit, and for ASSIGNEE's legal representatives and assigns to the full end of the term or terms for which said patent(s) may be granted, as fully and entirely as the

1.4

PHIP\425858\1 1

terit History

same would have been held by the undersigned ASSIGNORS had this assignment and sale not been made; and for the aforesaid consideration ASSIGNORS hereby covenant, agree and undertake to execute, whenever requested by the above-named ASSIGNEE, all patent applications, assignments, lawful oaths and any other papers which ASSIGNEE may deem necessary or desirable for securing to ASSIGNEE or for maintaining for ASSIGNEE all the patent(s) hereby assigned or agreed to be assigned; all without further compensation to the undersigned ASSIGNORS.

Date	James L. Riley	(Seal)
STATE OF	: : ss. :	
of, 2005, per known, and who having first exe me first duly sworn, did acknown	c in and for the State and County aforesaid, on this ersonally appeared James L. Riley, who being to me ecuted the foregoing instrument in my presence and has wledge the foregoing instrument as his/her free dechis/her for the purpose therein stated and intending to a said instrument be recorded.	personally nve been by ed and act,
	Notary Public My Commission Expires:	

PHIP\425858\1

PATENT REEL: 064359 FRAME: 0458

1'1

		(Seel)
Date	Carl H. June	(Seal)
STATE OF	: : ss.	
COUNTY OF		
of, 2005, known, and who having first exme first duly sworn, did ackrasigned, sealed and delivered by	personally appeared Carl H. June, who being to me ecuted the foregoing instrument in my presence and howledge the foregoing instrument as his/her free day his/her for the purpose therein stated and intending that said instrument be recorded.	e personally have been by eed and act,
_	Notary Public My Commission Expires:	
Date	Robert H. Vonderheide	(Seal)
STATE OF	: SS.	
of, 2005, personally known, and who have been by me first duly swo and act, signed, sealed and deli	lic in and for the State and County aforesaid, on this personally appeared Robert H. Vonderheide, who laving first executed the foregoing instrument in my porn, did acknowledge the foregoing instrument as his/hivered by his/her for the purpose therein stated and intending that said instrument be recorded.	being to me presence and her free deed
_	Notary Public My Commission Expires:	

PATENT REEL: 064359 FRAME: 0459

111

		•
8/19 (c\$ Date	Nicole Aqui	(Seal)
STATE OF Purphy : ss.		
Before me, a notary public in and for of, 2005, personally a known, and who having first executed the me first duly sworn, did acknowledge the signed, sealed and delivered by his/her for bound thereby and intending that said instru	e foregoing instrument in my presence and not be foregoing instrument as his/her free detailed the purpose therein stated and intending to	eed and act,
Many	Notary Public My Commission Expires: 12-19-	05-
8/19/05 Date	Megan M. Suhoski	(Seal)
STATE OF COUNTY OF Milaselphia: SS.		
Before me, a notary public in and for of lugust, 2005, personally personally known, and who having first exhave been by me first duly sworn, did acknown and act, signed, sealed and delivered by his legally bound thereby and intending that satisfactory.	nowledge the foregoing instrument as his/h s/her for the purpose therein stated and into	eing to me resence and er free deed

Notary Public
My Commission Expires: 12-19-02

PHIP\425858\1

RECORDED: 07/24/2023

PATENT

1.1

REEL: 064359 FRAME: 0460

4