PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7966782

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KAI W WUCHERPFENNING	02/23/2019
DENG PAN	02/25/2019

RECEIVING PARTY DATA

Name:	DANA-FARBER CANCER INSTITUTE, INC.
Street Address:	450 BROOKLINE AVENUE
City:	BOSTON
State/Country:	MASSACHUSETTS
Postal Code:	02215

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16612935

CORRESPONDENCE DATA

Fax Number: (678)406-8812

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.

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Email: tdavis@bakerdonelson.com

Correspondent Name: BAKER DONELSON IP DEPARTMENT

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Address Line 2: SUITE 1600

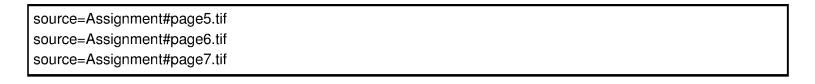
Address Line 4: ATLANTA, GEORGIA 30326

ATTORNEY DOCKET NUMBER:	5031461-000082-US2
NAME OF SUBMITTER:	TAMI DAVIS
SIGNATURE:	/tami davis/
DATE SIGNED:	05/19/2023

Total Attachments: 7

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> PATENT REEL: 063721 FRAME: 0707



PATENT REEL: 063721 FRAME: 0708

2347.001

Attorney Docket No. DFS-19060

ASSIGNMENT

WHEREAS, we, Kai W. Wucherpfennig and Deng Pan, have invented one or more inventions described in an application for Letters Patent of the United States, entitled METHODS FOR SENSITIZING CANCER CELLS TO T CELL-MEDIATED KILLING BY MODULATING MOLECULAR PATHWAYS the specification of which:

	is being executed herewith; and is about to be filed in the United States Patent Office;				
[x]	was filed on	June 6, 2017	as U.S. Application No	62/515738	;
	was filed on		_ as PCT Application No	;	
	was patented on		as U.S. Patent No.	;	

WHEREAS, **Dana-Farber Cancer Institute**, **Inc.**, (hereinafter "ASSIGNEE"), having principal offices at 450 Brookline Avenue, Boston, Massachusetts 02215-5450, desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention(s) as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon, and any substitution, reissue, continuation, divisional, revival and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said application; said invention(s), application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

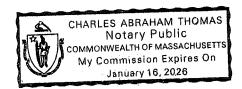
B4941812.1

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional, continuation or revival applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

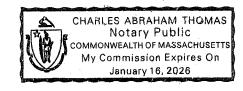
IN TESTIMONY WHEREOF, the undersigned has hereunto set their hand and seal on

the date after their signature.	, 1,01,001,110,000,000,000,000,000,000,0
Cai Wullett	2/23/18
Kai W. Wucherpfennig	(Date)
Commonwealth of Massachusetts)	
County of Suffolk)	
On this the 23 day of February Kai W. Wucherpfennig, to me personally known, and know the foregoing assignment, and acknowledged the signing o	wn to me to be the person who signed
	·hutiThung
Notary Public	
My commission expires January 29, 2019	



IN TESTIMONY WHEREOF, the undersigned has hereunto set their hand and seal on the date after their signature.

12		,	02/25/2019	
Deng Pan			(Date)	
Commonwealth of M	lassachusetts)			
County of)			
On this the Deng Pan, to me pers assignment, and ackr	sonally known, and l	known to me to l	, 20 ¹⁹ before me personally appear be the person who signed the foregoin eir free act and deed.	ed ıg
			charesting	
		Notary Publi	ic	
My commissi	on expires Januar	129/2019.		



ACKNOWLEDGEMENT OF ASSIGNEE:

I hereby Institut	acknowledge the foregoing executed Assignment	on behalf of	Dana-Farber Cancer
Ву:	Helary (Jahren)	Date:	1 8 MAR 2019
Name:	Hilary J. Libka, J.D.		
Title: _	Intellectual Property Counsel		

INVENTORS' ASSIGNMENT APPL. NO.: PCT/US2018/036046 FU REF.: DFS-19025 (25992.19025)

DFC1 REF.: 2347.010

ASSIGNMENT

WHEREAS, we, Deng Pan and Kai W. Wucherpfennig, have invented one or more inventions described in an application for Letters Patent of the United States, entitled METHODS FOR SENSITIZING CANCER CELLS TO T CELL-MEDIATED KILLING BY MODULATING MOLECULAR PATHWAYS the specification of which:

0	is being executed herewith; and is about to be filed in the United States Patent Office;					
0	was filed onas U.S. Application No					
[x]	was filed onJune 5, 2018 as PCT Application NoPCT/US2018/036046_;					
0	was patented on as U.S. Patent No;					

WHEREAS, Dana-Farber Cancer Institute, Inc., (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of Massachusetts, having principal offices at 450 Brookline Avenue, Boston, Massachusetts 02215-5450, desires to acquire an interest therein in accordance with agreements duly entered into with us:

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America. its territories and all foreign countries, in and to said invention(s) as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon, and any substitution, reissue, continuation, divisional, revival and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said application; said invention(s), application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

> PATENT REEL: 063721 FRAME: 0713

INVENTORS' ASSIGNMENT APPL, NO.: PCT/US2018/036046 PH BEF.: DFS-19025 (25992.19025)

DECEMBER: 2347,010

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional, continuation or revival applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

WITNESS my	hand this	20	day of	June	. 2018.	
			o, 1799 - 17,0000		ands:	

Deng Pan

Commonwealth of Massachusetts

County of SUHOIL

On this the O day of O C , 2018, before me personally appeared **Deng Pan**, to me personally known, and known to me to be the person who signed the foregoing assignment, and acknowledged the signing of same as her free act and deed.

ALEXIS D. BEVILACOUA
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
September 28, 2023

Molary Public Color

My commission expires Seaton Dec 28 2023

INVENTORS' ASSIGNMENT APPL. NO.: PCT/US2018/036046 FILREE.: DFS-19025 (25992.19025)

DECLREE: 2347.010

WITNESS my hand this <u>RO</u> day of <u>VOC</u> . 20)8. Commonwealth of Massachusetts County of SINCIK

On this the Oo day of ONC , 2018, before me personally appeared Kai W. Wucherpfennig, to me personally known, and known to me to be the person who signed the foregoing assignment, and acknowledged the signing of same as her free act and deed.

