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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARISSA DOLLED-FILHART	03/28/2014
KENNETH EMANCIPATOR	03/26/2014
ROBERT A. PIERCE	04/03/2014
DIANNA WU	03/26/2014

RECEIVING PARTY DATA

Name:	MERCK SHARP & DOHME CORP.
Street Address:	126 EAST LINCOLN AVENUE
Internal Address:	RY86-2011A
City:	RAHWAY
State/Country:	NEW JERSEY
Postal Code:	07065

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15712246

CORRESPONDENCE DATA

Fax Number: (732)594-4720

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: 7325942583

Email: us efs@merck.com

Correspondent Name: MERCK SHARP & DOHME CORP.
Address Line 1: 126 EAST LINCOLN AVENUE

Address Line 2: RY86-2011A

Address Line 4: RAHWAY, NEW JERSEY 07065

Total Attachments F		
DATE SIGNED:	07/24/2018	
SIGNATURE:	/Karen A, Margiotto/	
NAME OF SUBMITTER:	KAREN A. MARGIOTTO	
ATTORNEY DOCKET NUMBER:	23495-US-CNT	

Total Attachments: 5

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PATENT REEL: 046445 FRAME: 0079

Attorney Docket No.: 23495

WORLDWIDE ASSIGNMENT

WHEREAS, WE.

- (1) Marisa Dolled-Filhart, located at Highland Park, New Jesey,
- (2) Kenneth Emancipator, located at Bernardsville, New Jersey,
- (3) Robert H. Pierce, located at San Franciso, California,
- (4) Dianna Wu, located at Skillman, New Jersey,

(hereinafter ASSIGNORS, together with Frank Lynch, located in Newton, Pennsylvania are the inventors of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the Invention:

IMMUNOHISTOCHEMICAL ASSAY FOR DETECTING EXPRESSION OF PROGRAMMED DEATH LIGAND 1 (PD-L1)
IN TUMOR TISSUE

and/or in the following application(s):

U.S. Provisional Application No. 61/807,581 filed on April 2, 2013;

U.S. Application No. 14 782.00 having a filing date of 10-3-305; and

PCT International Application No. Oct 10514 3805 having a filing date of 3-31-2014.

WHEREAS WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter **ASSIGNEE**), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, said ASSIGNORS, do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND WE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

WE HEREBY authorize ASSIGNEE to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such components shall together constitute but one and the same document.

Computer Generated Template "Assignment-Merck Sharp & Dohme. Multiple Assignees Worldwide" (Assignment) Merck Sharp & Dohme Corp. profile BT

Attorney Docket No.: 23495

Executed this 28 day of 1	<u>'arch</u> , 2014
77 Swlled- Marisa Dolled-Filhart	<u>Felhart</u>
ACKNOWLEDGEMENT	
State of New Jersey)) s.s.:
County of Union) \$.5.:)
KINDWII, AND KINDWII DY ING IO DE	, 2014, personally appeared before me Marisa Dolled-Filhart, to me the same person(s) described in and who executed the foregoing instrument, and ecuted the same, of his (her) own free will for the purpose set forth.
(Seal)	
·	Notary Public
	PHYLLIS NOVA
	NOTARY PUBLIC OF NEW JERSEY My Commission Expires August 31, 2014

Notary Public

/PHYLLIS NOVA NOTARY PUBLIC OF NEW JERSEY My Commission Expires August 31, 2014

Worldwide Assignment Attorney Docket No.: 23495 Executed this 3 day of 4Robert A. Pierce **ACKNOWLEDGEMENT** State of California San hanus co County of Santa Clara) before me, Johan Indres Manchela personally appeared Robert H. Pierce who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/shé/they executed the same in his/hef/their authorized capacity(ies), and that by his/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal. Signature of Notary Priblic

Worldwide Assignment
Attorney Docket No.: 23495
Executed this 26 day of March , 2014
Davido
Dianna Wu
ACKNOWLEDGEMENT
State of New Jersey)
) s.s.: County of Union)
On this 26 day of 2014, personally appeared before me Dianna Wu , to me known, and known by me to be the same person(s) described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.
(Seal)
Notacý Public