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PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
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| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| NACER-EDDINE SERRIARI | 09/18/2015 |
| JACQUES NUNES | 09/21/2015 |
| MARGUERITE GHIOTTO | 09/21/2015 |

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PROPERTY NUMBERS Total: 2

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14282319 |
| Application Number: | 13148420 |

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PATENT REEL: 037574 FRAME: 0448

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SIGNATURE: /Christopher P. Singer/

DATE SIGNED: 01/25/2016

Total Attachments: 1

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PATENT REEL: 037574 FRAME: 0449

Attorney Docket No. 02970-24486US02

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned: Nacer-Eddine Serriari, Jacques Nunes, and Merguerite Ghiotto, the undersigned hereby sell(s) and assign(s) to:

- 1) INSTITUT PAOLI CALMETTES, 232 Boulevard de Sainte-Marguerite, Marseille Cedex 9, France F-13273;
- 2) INSERM (Institut National de la Sante et de la Recherche Medicale), 101, Rue de Tolbiac, Paris, France F-75013; and
- 3) Universite d'Aix Marseille, 58 bd Charles Livon, Marseille, France F-13007.

(the Assignee) his/her entire right, title and interest

check applicable box(es)

☑; for the United States of America (as defined in 35 U.S.C. §100). ☑: and throughout the world,

in the invention(s) known as "PD-1 Antibodies and PD-L1 Antibodies and Uses Thereof" for United States Application No. 14/282,319, filed May 20, 2014, in any and all applications thereon, in any and all Letters Patent(s) therefor, and in any and all reissues, extensions, renewals, reexaminations of such applications or Letters Patent(s) and divisional and continuation applications thereof, to the full end of the term or terms for which such Letters Patent(s) issue, including all claims, if any, that may have ansen for infringement prior to the date of this assignment, such entire right, title and interest to be held and enjoyed by the above-named Assignee to the same extent as they would have been held and enjoyed by the undersigned had this assignment and sale not been made.

The undersigned agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference that may be declared concerning the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned hereby represents that the undersigned has full right to convey the entire interest herein assigned, and that the undersigned has not executed, and will not execute, any agreement in conflict therewith.

The undersigned hereby grant(s) the attorney(s) and/or agent(s) associated with the customer number shown below the power to insert in this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Send Correspondence to:

Customer Number: 23446 McAndrews, Held & Malloy, Ltd

Direct Telephone Calls to: Nabeela Rasheed (312) 775-8000

| | IN WITNESS WHEREOF, execu | ited by the undersigned | on the date(s) opposite his/har name(s). |
|-------|---------------------------------------|---------------------------------------|--|
| Date: | Scoting 18, 2015 | Signature of Inventor: | |
| | × × × × × × × × × × × × × × × × × × × | | wacer-Eggine Seman *** |
| Date: | September 21, 2015 | Signature of Inventor: | J Mare's |
| | * | • • • • • • • • • • • • • • • • • • • | Jacques Nunes |
| Date: | <u>September 21, 20</u> 15 | Signature of Inventor: | C. C |
| | | | Marguerite Ghiotto |

PATENT REEL: 037574 FRAME: 0450

RECORDED: 01/25/2016