PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| SEQUENCE: | 1 |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------------------|----------------|
| KEVIN MICHAEL FOOTE | 07/21/2011 |
| JOHANNES WILHELMUS MARIA NISSINK | 07/21/2011 |
| PAUL TURNER | 07/21/2011 |

RECEIVING PARTY DATA

| Name: | ASTRAZENECA UK LIMITED |
|-----------------|------------------------|
| Street Address: | 2 KINGDOM STREET |
| City: | LONDON |
| State/Country: | ENGLAND |
| Postal Code: | W2 6BD |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14859567 |

CORRESPONDENCE DATA

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.

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ATTORNEY DOCKET NUMBER: 103985-US-CNT[4]

NAME OF SUBMITTER: DANIEL KOPP

SIGNATURE: /Daniel Kopp/

DATE SIGNED: 07/18/2016

Total Attachments: 2

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PATENT 503918857 REEL: 039176 FRAME: 0577

AZ Ref: 103985-1 US/O

THIS CONFIRMATORY ASSIGNMENT is made as of the 9th day of June 2011 (the "Effective Date")

BY AND BETWEEN

Kevin Michael FOOTE a British citizen, Johannes Wilhelmus Maria NISSINK a Dutch citizen and Paul TURNER a British citizen all of AstraZeneca R&D Alderley, Alderley Park, Macclesfield, Cheshire, SK10 4TG, United Kingdom (the "Inventor(s)")

AND

ASTRAZENECA UK LIMITED, a company incorporated in England and Wales under No. 3674842 whose registered office is at 2 Kingdom Street, London, England W2 6BD ("AstraZeneca")

Recitals

WHEREAS

- A. The Inventor(s) has made certain inventions (the "Inventions") in respect of which US Application No. 13/156684 was filed on the 9th day of June 2011 (the "Patent Application").
- B. The Inventors Kevin Michael FOOTE, Johannes Wilhelmus Maria NISSINK and Paul TURNER are employess of AstraZeneca.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

- 1. In consideration of the amounts paid to the Inventor(s) pursuant to their contract of employment with AstraZeneca, the Inventor(s) each hereby confirm that by virtue of their employment with AstraZeneca they have assigned, and do hereby assign, with full title guarantee, free from all and any charges or other third party rights, to AstraZeneca absolutely all their right, title and interest in and to the Inventions and the Patent Application, or any continuing or divisional application of the Patent Application in accordance with their contracts of employment and in accordance with the Patents Act 1977.
- 2. The Inventor(s) each hereby agree with AstraZeneca that their assignment to AstraZeneca includes, but is not limited to, any and all causes of action, claims, demands or other rights, occasioned from or because of any and all past and future infringement of any of the Patent Application, including all rights to recover damages, profits and injunctive relief for infringement of any of the Patent Application, and the right to file a patent application anywhere in the world claiming convention priority.
- 3. The Inventor(s) each hereby agree with AstraZeneca that they will execute such further documents and give such assistance at the expense of AstraZeneca as AstraZeneca may require:
 - a) to secure the vesting in AstraZeneca of all rights in the Patent Application and in such parties to whom AstraZeneca may assign its rights in the Patent Application;
 - b) to defeat any challenge to the validity of and resolve any questions concerning the Patent Application; and
 - c) to apply for, prosecute and obtain patent or similar protection in the United States and all other countries of the world for an invention embodied by the Patent Application, including the right to claim convention priority from such Application and including, without limitation, cooperating in any proceedings involving examinations, re-examinations, reissues, opposition

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and cancellation proceedings, interferences, infringement proceedings, court actions and the likę.

- 4. The Inventor(s) each hereby agree with AstraZeneca that they shall, at the expense of AstraZeneca, execute and sign all such instruments, applications and documents and do all such acts and things as may reasonably be required by AstraZeneca to enable AstraZeneca or its nominee to enjoy the full benefit of the rights assigned by this agreement.
- 5. AstraZeneca accepts the above assignment.
- 6. This assignment shall be governed by and construed in accordance with the laws of England and Wales and the parties hereby submit to the exclusive jurisdiction of the English courts.

Any attorney of record is authorized and requested by the execution of this assignment to insert into this assignment any further information necessary for recordation of this document.

This agreement has been entered into on the date stated at the beginning of it.

Signed at: Cheshire, United Kingdom

Date: 21St July

Witnessed by:

Witnessed by:

annes Wilhelmus Maria NISSINK

Signed at: Cheshire, United Kingdom

Signed on behalf of ASTRAZENECA UK LIMITED

Allen GILES - Authorised Signatory

RECORDED: 07/18/2016

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