505061832 08/24/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
GEORGE T. TOPALOV	08/08/2018

RECEIVING PARTY DATA

Name:	KNOPP BIOSCIENCES LLC	
Street Address:	2100 WHARTON STREET	
Internal Address:	SUITE 615	
City:	PITTSBURGH	
State/Country:	PENNSYLVANIA	
Postal Code:	15203	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15591884

CORRESPONDENCE DATA

Fax Number: (412)281-0717

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: (412) 454-5000

Email:docketingpgh@pepperlaw.comCorrespondent Name:PEPPER HAMILTON LLPAddress Line 1:500 GRANT STREET

Address Line 2: SUITE 5000

Address Line 4: PITTSBURGH, PENNSYLVANIA 15219-2507

ATTORNEY DOCKET NUMBER:	131717.02711	
NAME OF SUBMITTER:	CHARLES J. VRSCAK, JR.	
SIGNATURE:	/Charles J. Vrscak, Jr./	
DATE SIGNED:	08/24/2018	

Total Attachments: 5

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PATENT REEL: 046693 FRAME: 0549

ASSIGNMENT

WHEREAS, I, GEORGE T. TOPALOV (hereinafter "Assignor"), am an inventor of a certain new and useful invention(s) as set forth and disclosed in the patent application(s) listed in **Schedule A** attached hereto (hereinafter the "Invention");

WHEREAS, KNOPP BIOSCIENCES LLC, having an address of 2100 Wharton Street, Suite 615, Pittsburgh, PA 15203 (hereinafter "Assignee"), wishes to acquire Assignor's entire right, title and interest in and to said Invention and in and to any and all Letters Patent that may be obtained therefor in the United States and any and all foreign countries;

WHEREAS, Assignor previously conveyed to Assignee all of Assignor's right, title, and interest in the Invention as described in such prior-filed application(s) pursuant to an assignment dated March 18, 2013 which has been recorded at the U.S. Patent and Trademark Office at 030168/0789 and an assignment dated January 10, 2018 which has been recorded at the U.S. Patent and Trademark Office at 044627/0398 and at 046238/0838 (hereinafter, "Assignment Agreements");

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, at least as of May 10, 2017, the parties agree as follows.

Assignor, does hereby confirm Assignor's previous assignment, including pursuant to the Assignment Agreement, and does hereby sell, assign, transfer and set over unto Assignee, its legal representatives, successors, and assigns, Assignor's entire right, title and interest in and to said Invention as set forth in the scheduled application(s), including any applications which claim priority to the scheduled application(s), any application(s) to which the scheduled application(s) claim priority, and any continuations, continuations-in-part, divisions, registrations, reissues, re-examinations or extensions thereof, whether in the U.S. or any foreign country, and in and to any and all patents of the United States and foreign countries which may be issued for said Invention.

Assignor does hereby sell, assign, transfer and set over unto Assignee, its legal representatives, successors, and assigns all rights to claim priority from the Invention and scheduled application(s); all causes of action and remedies related to the Invention and scheduled application(s) (including, without limitation, the right to sue for past, present, or future infringement, misappropriation or violation of rights related to any of the foregoing and the right to collect royalties and other payments under or on account of any of the foregoing); and any and all other rights and interests arising out of, in connection with, or in relation to the Invention and scheduled application(s).

Assignor shall not execute any writing or do any act whatsoever conflicting with the terms and conditions of this Assignment. Assignor will, at any time upon request, without further or additional consideration, but at the expense of Assignee, execute such additional assignments and other writings and do such additional acts as Assignee may deem necessary or desirable to perfect Assignee's enjoyment of this grant, and render all necessary assistance in making the application for or obtaining original patents or applications, continuations,

Attorney Docket No.: 131717.02711

continuations-in-part, divisions, registrations, reissues, re-examinations or extensions thereof, whether in the U.S. or any foreign country, for said Invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any and all proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns and legal representatives of Assignor and Assignee.

The undersigned hereby grant(s) the firm of PEPPER HAMILTON LLP the power to insert on this Assignment any further identification, including the country, application number, filing date and/or title, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office or other patent office for recordation of this document.

The undersigned requests that any patents that may be issued for said Invention be issued to Assignee, its legal representatives, successors or assigns, as an owner of Assignor's entire right, title and interest in and to said patent and the Invention covered thereby.

Date: 8/8/2018

Assignor:

ÆORGE T. TOPALOV

ACKNOWLEDGMENT

STATE OF

COUNTY OF

SS:

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On this day of _________, 2018, before me, the undersigned Notary Public, personally appeared GEORGET. TOPALOV, to me known (or satisfactorily proven) to be the person named in and who executed the above instrument, and acknowledged to me that he executed the same for the uses and purposes therein set forth.

SEAL

Notary Public

Commonwealth of Pennsylvania – Notary Seal RACHEL L KOPPER – Notary Public Allegheny County

My Commission Expires Dec 17, 2021 Commission Number 1253504 My commission expires

Agreed and accepted:	KNOPP BIOSCIENCES LLC
Date: 8 10 2018	Assignee: Drung T. Hebrank Title: Eve
STATE OF Poncylvania	ACKNOWLEDGMENT)
COUNTY OF Alleghen) SS:
On this day of Notary Public, personally appearsatisfactorily proven) to be the peracknowledged to me that he/she exe	, 2018, before me, the undersigned ared <u>Gray T. Velout</u> , to me known (or son named in and who executed the above instrument, and ecuted the same for the uses and purposes therein set forth.
SEAL	Notary Public ALKM My commission expires 12/17/2021
Commonwealth of Pennsylvania – Notary Seal RACHEL L KOPPER – Notary Public Allegheny County My Commission Expires Dec 17, 2021 Commission Number 1253504	

-4-

Attorney Docket No.: 131717.02711

PATENT

SCHEDULE A

Country	Patent Application No.	Filing Date	Title
US	61/793,892	March 15, 2013	IMIDAZO[4,5-B]PYRIDIN-2-YL AMIDES AS KV7 CHANNEL ACTIVATORS
WO	PCT/US2014/030686	March 17, 2014	IMIDAZO[4,5-B]PYRIDIN-2-YL AMIDES AS KV7 CHANNEL ACTIVATORS
US	14/776,271	September 14, 2015	IMIDAZO[4,5-B]PYRIDIN-2-YL AMIDES AS KV7 CHANNEL ACTIVATORS
US	15/591,884	May 10, 2017	IMIDAZO(4,5-B) PYRIDIN-2-YL AMIDES AS KV7 CHANNEL ACTIVATORS
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