

<b>PATENT ASSIGNMENT COVER SHEET</b>
--------------------------------------

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5035570

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
FELIKS FRENKEL	06/29/2018
NIKITA KOTLOV	06/29/2018
ALEXANDER BAGAEV	06/29/2018
RAVSHAN ATAULLAKHANOV	06/29/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	BOSTONGENE, LLC
<b>Street Address:</b>	191 WESTON ROAD
<b>City:</b>	LINCOLN
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	01773
<b>PROPERTY NUMBERS Total: 3</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16006085
<b>Application Number:</b>	16006129
<b>PCT Number:</b>	US1837018
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(617)646-8646
<i>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.</i>	
<b>Phone:</b>	617-646-8000
<b>Email:</b>	patents_DanR@wolfgreenfield.com
<b>Correspondent Name:</b>	DANIEL G. RUDOY
<b>Address Line 1:</b>	WOLF, GREENFIELD & SACKS, P.C.
<b>Address Line 2:</b>	600 ATLANTIC AVENUE
<b>Address Line 4:</b>	BOSTON, MASSACHUSETTS 02210-2206
<b>ATTORNEY DOCKET NUMBER:</b>	B1462.70003
<b>NAME OF SUBMITTER:</b>	SCOTT R. WHITTEMORE
<b>SIGNATURE:</b>	/SCOTT R. WHITTEMORE/
<b>DATE SIGNED:</b>	07/03/2018

**Total Attachments: 7**

source=B1462.70003US00\_US01\_WO00#page1.tif

source=B1462.70003US00\_US01\_WO00#page2.tif

source=B1462.70003US00\_US01\_WO00#page3.tif

source=B1462.70003US00\_US01\_WO00#page4.tif

source=B1462.70003US00\_US01\_WO00#page5.tif

source=B1462.70003US00\_US01\_WO00#page6.tif

source=B1462.70003US00\_US01\_WO00#page7.tif

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

1. Sell, assign and transfer to **BostonGene, LLC**, a Delaware Limited Liability Company having a place of business at **191 Weston Road, Lincoln, Massachusetts 01773**, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in

the patent application for United States Letters Patent filed in the United States Patent and Trademark Office on **June 12, 2018** under No. **16/006,085**, bearing Attorney Docket No. **B1462.70003US00**, and entitled **SYSTEMS AND METHODS FOR IDENTIFYING RESPONDERS AND NON-RESPONDERS TO IMMUNE CHECKPOINT BLOCKADE THERAPY**;

the patent application for United States Letters Patent filed in the United States Patent and Trademark Office on **June 12, 2018** under No. **16/006,129**, bearing Attorney Docket No. **B1462.70003US01**, and entitled **SYSTEMS AND METHODS FOR IDENTIFYING RESPONDERS AND NON-RESPONDERS TO IMMUNE CHECKPOINT BLOCKADE THERAPY**;

the International Application filed on **June 12, 2018** under International Application No. **PCT/US2018/037018**, bearing Attorney Docket No. **B1462.70003**, and entitled **SYSTEMS AND METHODS FOR IDENTIFYING RESPONDERS AND NON-RESPONDERS TO IMMUNE CHECKPOINT BLOCKADE THERAPY**;

and in and to the application and all corresponding provisional, national, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions and designs; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions and designs, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea; as well as the right to sue in its own name and recover damages for past infringement of any United States Letters Patent and foreign patent, including a reasonable royalty relating to provisional rights under 35 U.S.C. § 154(d) that have attached to any published United States patent application, on the inventions and designs; and to the extent that any above mentioned right, title and/or interest has previously been assigned to the Assignee via a different instrument, hereby confirm said assignment;

2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions and designs in its own name; and when requested, without charge to but at the expense of the Assignee, agree to carry out in good faith the intent and purpose of this Assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions and designs, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and designs and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in

U.S. Patent App. No.: 16/006,085 Filing Date: June 12, 2018	U.S. Patent App. No.: 16/006,129 Filing Date: June 12, 2018	International App. PCT/US2018/037018 Filing Date: June 12, 2018
--	--	--

securing and maintaining proper protection for the inventions and designs and for vesting title to the inventions and designs and all applications for patents and all patents on the inventions and designs, in the Assignee;

3. Request the Director of the United States Patent and Trademark Office and foreign patent authorities to issue the Letters Patent or other intellectual property rights, including foreign patents, to the Assignee;
4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing application identification information or correct any errors in the application identification information provided above, whether discovered prior to or after recordation;
5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Attorney Docket Nos. B1462.70003US00; B1462.70003US01; B1462.70003

6434301.1

U.S. Patent App. No.: 16/006,085 Filing Date: June 12, 2018	U.S. Patent App. No.: 16/006,129 Filing Date: June 12, 2018	International App. PCT/US2018/037018 Filing Date: June 12, 2018
--	--	--

6/29/2018  
Date

[Signature]  
Inventor: Feliks Frenkel  
Address: Krylatsky hills 30-5-890  
Moscow 121614  
RUSSIAN FEDERATION  
Citizenship: Russian Federation

Witness:  
6/29/2018  
Date

[Signature]  
Signature

Name: Galina Rodneva

Address: Moscow, Vavilova, 48

Witness:  
\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

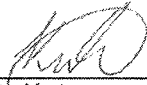
Name: \_\_\_\_\_

Address: \_\_\_\_\_

Attorney Docket Nos. B1462.70003US00; B1462.70003US01; B1462.70003

U.S. Patent App. No.: 16/006,085 Filing Date: June 12, 2018	U.S. Patent App. No.: 16/006,129 Filing Date: June 12, 2018	International App. PCT/US2018/037018 Filing Date: June 12, 2018
--	--	--

6/29/2018  
Date

  
Inventor: Nikita Kotlov  
Address: 2nd Botanicheskiy proezd 4-29  
Moscow  
RUSSIAN FEDERATION  
Citizenship: Russian Federation

Witness:  
6/29/2018  
Date

  
Signature

Name: Galina Bradneva

Address: Moscow, Vavilova, 48

Witness:  
\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

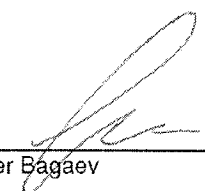
Name: \_\_\_\_\_

Address: \_\_\_\_\_

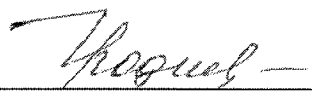
Attorney Docket Nos. B1462.70003US00; B1462.70003US01; B1462.70003

U.S. Patent App. No.: 16/006,085 Filing Date: June 12, 2018	U.S. Patent App. No.: 16/006,129 Filing Date: June 12, 2018	International App. PCT/US2018/037018 Filing Date: June 12, 2018
--	--	--

06/29/2018  
Date

  
 Inventor: Alexander Bagaev  
 Address: 10 Letchika Gricevca St.  
 Moscow 142750  
 RUSSIAN FEDERATION  
 Citizenship: Russian Federation

Witness:  
6/29/2018  
 Date

  
 Signature  
 Name: Galina Bradneva  
 Address: Moscow, Varilova, 48

Witness:  
 \_\_\_\_\_  
 Date

\_\_\_\_\_  
 Signature  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_

Attorney Docket Nos. B1462.70003US00; B1462.70003US01; B1462.70003

U.S. Patent App. No.: 16/006,085 Filing Date: June 12, 2018	U.S. Patent App. No.: 16/006,129 Filing Date: June 12, 2018	International App. PCT/US2018/037018 Filing Date: June 12, 2018
--	--	--

\_\_\_\_\_  
Date

\_\_\_\_\_  
Inventor: Maksym Artomov  
Address: 1011 N Taylor Avenue  
Kirkwood, Missouri 63122  
Citizenship: Ukraine

Witness:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

Witness:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

Attorney Docket Nos. B1462.70003US00; B1462.70003US01; B1462.70003



U.S. Patent App. No.: 16/006,085 Filing Date: June 12, 2018	U.S. Patent App. No.: 16/006,129 Filing Date: June 12, 2018	International App. PCT/US2018/037018 Filing Date: June 12, 2018
--	--	--

27 June, 2018  
Date

  
 Inventor: Ravshan Ataulakhanov  
 Address: Malaya Bronnaya Street  
 Building 20, Corpus 2  
 Apartment 28  
 Moscow 123104  
 RUSSIAN FEDERATION  
 Citizenship: Russian Federation

Witness:  
6/29/2018  
 Date

  
 Signature

Name: Brodnova Galina

Address: Moscow, Kuvilovo, 48

Witness:  
 \_\_\_\_\_  
 Date

Signature

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
 \_\_\_\_\_

Attorney Docket Nos. B1462.70003US00; B1462.70003US01; B1462.70003