PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5426374

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
FLAGSHIP PIONEERING, INC.	07/17/2018	

RECEIVING PARTY DATA

Name:	FLAGSHIP PIONEERING INNOVATIONS V, INC.	
Street Address:	55 CAMBRIDGE PARKWAY	
Internal Address: 8TH FLOOR		
City:	CAMBRIDGE	
State/Country: MASSACHUSETTS		
Postal Code:	02142	

PROPERTY NUMBERS Total: 2

Property Type	Number	
Application Number:	62440676	
Application Number:	15858581	

CORRESPONDENCE DATA

Fax Number: (503)595-5301

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: 503-595-5300

Email: susan.graf@klarquist.com

Correspondent Name: SUSAN W. GRAF / KLARQUIST SPARKMAN, LLP

Address Line 1: 121 SW SALMON STREET

Address Line 2: SUITE 1600

Address Line 4: PORTLAND, OREGON 97204

ATTORNEY DOCKET NUMBER: 9582-98296-01/-02

NAME OF SUBMITTER: SUSAN W. GRAF, PH.D.

SIGNATURE: /Susan W. Graf/

DATE SIGNED: 03/18/2019

Total Attachments: 4

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PATENT 505379581 REEL: 048622 FRAME: 0634

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PATENT REEL: 048622 FRAME: 0635

ASSIGNMENT AGREEMENT

This Assignment Agreement ("Agreement") is entered into as of December 30, 2016 (the "Execution Date"), by and between FLAGSHIP PIONEERING, INC., a Delaware corporation having a place of business at 55 Cambridge Parkway, 8th Floor, Cambridge, Massachusetts 02142, its successors and assigns (collectively referred to herein as "FP"), and FLAGSHIP PIONEERING INNOVATIONS V, INC., a Delaware corporation with its principal office at 55 Cambridge Parkway, 8th Floor, Cambridge, Massachusetts 02142, its successors and assigns (collectively referred to herein as "FPI").

WHEREAS, FP owns certain FP Patent Rights (as defined below); and

WHEREAS, FPI and FP wish to have FP assign the FP Patent Rights to FPI,

NOW, THEREFORE, for good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, FPI and FP agree as follows:

1. Definitions

- 1.1. "FP Patent Rights" means any and all patent rights owned by FP to (i) any and all inventions disclosed in the patents and patent applications listed in Exhibit A, and (ii) all continuing, divisional, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any and all inventions disclosed in the patents and patent applications listed in Exhibit A; and in and to (iii) all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said any and all inventions including the right to apply for patent rights in the United States and each foreign country, and (iv) all rights to claim priority therefrom; and further including (v) all rights to all causes of action in law or equity relating thereto, and (vi) all rights to sue, counterclaim, claim and recover damages, restitution, injunctive, and other legal or equitable relief for past, present or future infringement, misuse, misappropriation, violation, dilution or default of the rights assigned.
- 1.2. "Party" means FP or FPI individually, and when used in the plural, means FP and FPI collectively.

2. Assignment of FP Patent Rights.

- 2.1. Upon the Effective Date, FP hereby assigns to FPI the entire right, title and interest for the United States and all foreign countries, in, to and under any and all inventions disclosed in the patents and patent applications in the FP Patent Rights, and the right to all causes of action in law or equity relating thereto, including the right to sue for past, present or future infringement of the FP Patent Rights. Such assignment shall be effective upon the Effective Date.
- 2.2. FP shall execute for the benefit of FPI any assignment document which is necessary for submission to patent offices in any country to evidence the assignment of to FPI.

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- 2.3. When requested, FP agrees to carry out in good faith the intent and purpose of this Assignment Agreement, by executing any further documents required by FPI to effect, secure and enforce the rights granted to FPI under this Assignment Agreement for all FP Patent Rights, and generally by doing everything reasonably possible which FPI shall consider desirable for aiding in securing and maintaining proper patent protection for any and all inventions disclosed in the patents and patent applications in the FP Patent Rights and for vesting title to said any and all inventions and all applications for patents and all patents on said inventions, in FPI.
- 2.4. FPI may record this Assignment Agreement with the United States Patent and Trademark Office ("USPTO") and with comparable offices in other jurisdictions throughout the world. FP hereby authorizes and requests the Commissioner for Patents of the USPTO, and any Official of any country or countries foreign to the United States whose duty is to record documents evidencing ownership of patents and patent applications to record FPI as owner of the patents and applications in the FP Patent Rights.
- 2.5. FP hereby authorizes and requests the Commissioner for Patents of the USPTO, and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue all letters patent related to the FP Patent Rights to FPI, in accordance with the terms of this Assignment Agreement.
- 2.6. FP appoints, authorizes and requests the attorneys appointed in the patents or patent applications in the FP Patent Rights to hereafter amend this Assignment Agreement, as needed, by inserting the filing date and serial number of patents or patent applications in the FP Patent Rights when known.

3. Representations, Warranties and Covenants

- 3.1. Representations and Warranties
 - (a) Each Party represents and warrants to the other that:
 - i. it is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation;
 - ii. it has the full right, power and authority to enter into this Assignment Agreement and to grant the rights and licenses granted by it under this Assignment Agreement; and
 - iii. this Assignment Agreement has been duly executed and delivered on behalf of it, and constitutes a legal, valid, binding obligation, enforceable against it in accordance with the terms hereof.
 - (b) FP represents, warrants, and covenants that that no assignment, grant, mortgage, license, or other agreement affecting the rights and property with respect to the FP Patent Rights herein conveyed has been made to others by FP and that full right to convey the same as herein expressed is possessed by FP.

4.	FPI does hereby acknowledge and accept the above assignment and transfer of all the rights,
	title and interest enumerated above, including but not limited to the right to priority and the
	right to sue for past, present or future infringement.

IN WITNESS WHEREOF, the Parties have caused this Assignment Agreement to be duly executed by its duly authorized representatives as of the Effective Date.

FLAGSHIP PIONEERING, INC.	FLAGSHIP PIONEERING INNOVATIONS V, INC.	
Name: Charles Carelli	Name: Noubar Afeyan	
Title: CFO	Title: CEO	
Date: 7/17/18	Date: 7/19/18	

EXHIBIT A

FP PATENT RIGHTS

Family No.	Application Serial No.	Title	Filing Date	Jurisdiction
003	62/440,676	NOVEL PLANT CELLS, PLANTS, AND SEEDS	12/30/2016	US
003	15/858,581	NOVEL PLANT CELLS, PLANTS, AND SEEDS	12/29/2017	US

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