506096623 06/08/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6143344

		NEW	ASSIGNMENT			
NATURE OF CONVEYANCE:		ASS	ASSIGNMENT			
CONVEYING PARTY D	ΑΤΑ	•				
		Name	e			Execution Date
PETER LAMMERS						2/19/2018
NICHOLAS CSAKAN						2/18/2018
WONKUN PARK	WONKUN PARK					2/19/2018
MARK SEGER						2/18/2018
RECEIVING PARTY DA	ТА					
Name:	ARIZONA BOARD OF REGENTS ON BEHALF OF ARIZONA STATE UNIVERSITY					
Street Address:	SKYSONG, 1475 N. SCOTTSDALE ROAD					
Internal Address:	SUITE 200					
City:	SCOTTSDALE					
State/Country:	ARIZONA					
Postal Code:	85257					
PROPERTY NUMBERS Total: 1 Property Type			Number		-	
		10707040	Number		-	
		16767948	Number		-	
Application Number:	ΔΤΔ	16767948	Number		-	
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ASSIGNMENT

This Assignment is made and executed by **Peter Lammers, Nicholas Csakan, Wonkun Park,** and **Mark Seger** (hereinafter "Assignors"), to and in favor of ARIZONA BOARD OF REGENTS ON BEHALF OF ARIZONA STATE UNIVERSITY, having a business address of SkySong, 1475 N. Scottsdale Road, Suite 200, Scottsdale, Arizona 85257 (hereinafter "Assignee").

Whereas each of the Assignors desires to assign his entire right, title and interest in and to the invention(s) described in the Patent Cooperation Treaty (PCT) Application No. PCT/US2018/065822 filed on December 14 2018 and titled "METHODS OF INCREASING BIOMASS PRODUCTIVITY IN ALGAE CULTURES" (hereinafter the "Patent Application"); and

Whereas Assignee has provided such valuable consideration to the Assignors;

Accordingly, each of the Assignors warrants, covenants and agrees as follows:

1. Each of the Assignors hereby sells, assigns and conveys to Assignee such Assignor's entire right, title and interest in and to the invention(s) described in the Patent Application, including the Patent Application itself and all substitute, non-provisional, continuation, continuation-in-part and divisional applications based in whole or in part on the Patent Application, and including all patents resulting therefrom and all reissues and extensions thereof, and including any and all rights of priority resulting from the filing of any such applications within the United States.

2. Each of the Assignors hereby sells, assigns and conveys to Assignee such Assignor's entire right, title and interest in all counterparts to the Patent Application that have been or may be filed outside the United States or under the Patent Cooperation Treaty, whether pursued as a patent, an inventor's certificate, a utility model or the like, including all rights of priority based on the Patent Application, further including all continuation, continuation-in-part and divisional applications based in whole or in part on the non-U.S. counterparts, and still further including all patents, inventor's certificates, utility models, reissues and extensions resulting from any of the non-U.S. counterparts.

3. Each of the Assignors hereby grants to Assignee the sole and exclusive right to prosecute the Patent Application and all related applications as described in Paragraphs 1 and 2 above, as well as any opposition proceedings, reissue applications, reexaminations, and nullity or invalidity proceedings. Each of the Assignors authorizes all governmental bodies having the power to issue patents, inventor's certificates or utility models to issue a patent, inventor's certificate or utility model based on the Patent Application or any related applications as described in Paragraphs 1 and 2 above in the name of Assignee.

4. Each of the Assignors agrees upon request and without further consideration, but at Assignee's expense: (a) to assist Assignee in prosecuting the Patent Application and all related applications as described in Paragraphs 1 and 2 above, as well as opposition proceedings, reissue

PATENT REEL: 052870 FRAME: 0251

ASSIGNMENT

Title: "Methods of Increasing Biomass Productivity in Algae Cultures" International Application No. PCT/US2018/065822

applications, reexaminations, and nullity or invalidity proceedings; (b) to provide Assignee with information concerning the Patent Application and the related applications described in Paragraphs 1 and 2 above to enable Assignee to obtain, secure and protect all of the rights, title and interest sold, assigned, conveyed and granted under this Assignment (the "Assigned Assets"); (c) to sign papers, take oaths and testify in legal proceedings to enable Assignee to obtain, secure and protect the Assigned Assets; and (d) to perform all acts reasonably necessary to enable Assignee to obtain, secure and protect the Assigned Assets, including assistance in any proceedings pertaining to the Patent Application and the related applications described in Paragraphs 1 and 2 above or to their enforcement.

5. Each of the Assignors warrants and covenants that such Assignor has the full right to sell, assign and convey the Assigned Assets, that all of the Assigned Assets are free and clear of all mortgages, liens, security interests, charges, claims, royalty obligations and encumbrances of any nature whatsoever and that the Assignor has not executed and will not execute any agreement in conflict with this Assignment.

Assignee may assign the Assigned Assets in whole or in part. All references 6. herein to Assignce include any successors or assigns of Assignee.

Each of the Assignors acknowledges that Assignee has paid valuable 7. consideration for the Assigned Assets.

12/19/18

Date

12/18/18 Date

12/18/18 Date

12/18/18 Date

Peter Lammers

Cattan Sale.

Nicholas Csakan

Wonkun Park

Mark Seger

ASSIGNMENT

This Assignment is made and executed by **Peter Lammers, Nicholas Csakan, Wonkun Park,** and **Mark Seger** (hereinafter "Assignors"), to and in favor of ARIZONA BOARD OF REGENTS ON BEHALF OF ARIZONA STATE UNIVERSITY, having a business address of SkySong, 1475 N. Scottsdale Road, Suite 200, Scottsdale, Arizona 85257 (hereinafter "Assignee").

Whereas each of the Assignors desires to assign his entire right, title and interest in and to the invention(s) described in the Patent Cooperation Treaty (PCT) Application No. PCT/US2018/065822 filed on December 14 2018 and titled "METHODS OF INCREASING BIOMASS PRODUCTIVITY IN ALGAE CULTURES" (hereinafter the "Patent Application"); and

Whereas Assignee has provided such valuable consideration to the Assignors;

Accordingly, each of the Assignors warrants, covenants and agrees as follows:

1. Each of the Assignors hereby sells, assigns and conveys to Assignee such Assignor's entire right, title and interest in and to the invention(s) described in the Patent Application, including the Patent Application itself and all substitute, non-provisional, continuation, continuation-in-part and divisional applications based in whole or in part on the Patent Application, and including all patents resulting therefrom and all reissues and extensions thereof, and including any and all rights of priority resulting from the filing of any such applications within the United States.

2. Each of the Assignors hereby sells, assigns and conveys to Assignee such Assignor's entire right, title and interest in all counterparts to the Patent Application that have been or may be filed outside the United States or under the Patent Cooperation Treaty, whether pursued as a patent, an inventor's certificate, a utility model or the like, including all rights of priority based on the Patent Application, further including all continuation, continuation-in-part and divisional applications based in whole or in part on the non-U.S. counterparts, and still further including all patents, inventor's certificates, utility models, reissues and extensions resulting from any of the non-U.S. counterparts.

3. Each of the Assignors hereby grants to Assignee the sole and exclusive right to prosecute the Patent Application and all related applications as described in Paragraphs 1 and 2 above, as well as any opposition proceedings, reissue applications, reexaminations, and nullity or invalidity proceedings. Each of the Assignors authorizes all governmental bodies having the power to issue patents, inventor's certificates or utility models to issue a patent, inventor's certificate or utility model based on the Patent Application or any related applications as described in Paragraphs 1 and 2 above in the name of Assignee.

4. Each of the Assignors agrees upon request and without further consideration, but at Assignee's expense: (a) to assist Assignee in prosecuting the Patent Application and all related applications as described in Paragraphs 1 and 2 above, as well as opposition proceedings, reissue

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PATENT REEL: 052870 FRAME: 0253

Docket No. 11157-019PCT

ASSIGNMENT Title: "Methods of Increasing Biomass Productivity in Algae Cultures" International Application No. PCT/US2018/065822

applications, reexaminations, and nullity or invalidity proceedings; (b) to provide Assignee with information concerning the Patent Application and the related applications described in Paragraphs 1 and 2 above to enable Assignee to obtain, secure and protect all of the rights, title and interest sold, assigned, conveyed and granted under this Assignment (the "Assigned Assets"); (c) to sign papers, take oaths and testify in legal proceedings to enable Assignee to obtain, secure and protect the Assigned Assets; and (d) to perform all acts reasonably necessary to enable Assignee to obtain, secure and protect the Assigned Assets; including assistance in any proceedings pertaining to the Patent Application and the related applications described in Paragraphs 1 and 2 above or to their enforcement.

5. Each of the Assignors warrants and covenants that such Assignor has the full right to sell, assign and convey the Assigned Assets, that all of the Assigned Assets are free and clear of all mortgages, liens, security interests, charges, claims, royalty obligations and encumbrances of any nature whatsoever and that the Assignor has not executed and will not execute any agreement in conflict with this Assignment.

6. Assignee may assign the Assigned Assets in whole or in part. All references herein to Assignee include any successors or assigns of Assignee.

7. Each of the Assignors acknowledges that Assignee has paid valuable consideration for the Assigned Assets.

Date

Peter Lammers

Date

Dec. 19th, 2018

Date

Nicholas Csakan

Wonkun Park

Date

Mark Seger

2