504122455 12/05/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4169125

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
WOLF B. FROMMER	02/18/2011
SYLVIE LALONDE	02/22/2011

RECEIVING PARTY DATA

Name:	CARNEGIE INSTITUTION OF WASHINGTON	
Street Address:	1530 P STREET, N.W.	
City:	WASHINGTON	
State/Country:	D.C.	
Postal Code:	20005	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15348419

CORRESPONDENCE DATA

Fax Number: (703)816-4000

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: 7038164000

Email: ptomail@nixonvan.com

Correspondent Name: B. J. SADOFF

Address Line 1: 901 NORTH GLEBE ROAD

Address Line 2: 11TH FLOOR

Address Line 4: ARLINGTON, VIRGINIA 22203

ATTORNEY DOCKET NUMBER:	BJS-6146-138
NAME OF SUBMITTER:	B. J. SADOFF
SIGNATURE:	/B. J. Sadoff/
DATE SIGNED:	12/05/2016

Total Attachments: 4

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PATENT REEL: 040515 FRAME: 0644

504122455

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

NOVEL SUGAR TRANSPORTERS

for which I/WE executed an application for United States Letters Patent concurrently herewith; or filed an application for United States Letters Patent on July 21, 2009, (Application No. 12/773,500); and

WHEREAS, <u>Carnegie Institution of Washington</u>, is duly organized and existing under the laws of the <u>District of Columbia</u>, whose post office address is <u>1530 P Street</u>, <u>N.W.</u>, <u>Washington</u>, <u>D.C. 20005</u>, (hereinafter referred to as Assignees), are desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to be issue upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignees are hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignees, their lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with the assignees, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said assignees, their successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignees, their successors and assigns.

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).

County of		Wolf B. Frommer Full Name of First Assignor
Subscribed and sworn to before me this day of, 2010 Notary Public	SS.	Carnegie Institution 260 Panama Street Stanford, CA 94305 Address First Assignor's Signature OZ (18 / 201(
		Date
Names of additional inventors attached:	Yes ý No	

ATTORNEY DOCKET NO: 056100-5077 SOLE/JOINT INVENTION (U.S. Rights Only)

County of		Sylvie Lalonde Full Name of Second Assignor
State of	SS.	Carnegie Iristitution 260 Panama Street
Subscribed and sworn to before me this day of, 2010.		Stanford, CA 94305 Address
Notary Public		Second Assignor's Signature
		Date
Names of additional inventors attached:]Yes ⊠ N	O

Morgan, Lewis & Bockius LLP

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

NOVEL SUGAR TRANSPORTERS

for which I/WE executed an application for United States Letters Patent concurrently herewith; or filed an application for United States Letters Patent on July 21, 2009, (Application No. 12/773,500); and

WHEREAS, <u>Carnegie Institution of Washington</u>, is duly organized and existing under the laws of the <u>District of Columbia</u>, whose post office address is <u>1530 P Street</u>, <u>N.W.</u>, <u>Washington</u>, <u>D.C. 20005</u>, (hereinafter referred to as Assignees), are desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to be issue upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignees are hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignees, their lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with the assignees, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said assignees, their successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignees, their successors and assigns.

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).

County of		Wolf B. Frommer
		Full Name of First Assignor
State of		7 an Harris of Friedrich Golgitor
		Carnegie Institution
	SS.	260 Panama Street
		Stanford, CA 94305
Subscribed and sworn to before me		Address
this day of, 2011		
Notary Public		First Assignor's Signature
		Date
Names of additional inventors attached: Yes	ý No	
radinos or additional inventors attached.	y 140	

Morgan, Lewis & Bockius LLP

ATTORNEY DOCKET NO: 056100-5077 SOLE/JOINT INVENTION

(U.S. Rights Only)

_county of _ City of: Montical state of _ Province of: Quebec	SS.	Sylvie Lalonde Full Name of Second Assignor Carnegie Institution 260 Panama Street Stanford, CA 94305 Sylvie Lalonde 8 101 Cure Cure Cure Cure Cure Cure Cure Cure
Subscribed and sworn to before me this 22 day of frequency 2011.		Address Second Assignor's Signature
MARILYN MORIN		02-22-2011 Date
Names of additional inversors attached:	□ Yes 図 No	

Morgan, Lewis & Bockius LLP

RECORDED: 12/05/2016

PATENT REEL: 040515 FRAME: 0648