

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
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EPAS ID: PAT2809866

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
PRITI PHARKYA	02/24/2014
ANTHONY P. BURGARD	02/24/2014
STEPHEN J. VAN DIEN	02/24/2014
ROBIN E. OSTERHOUT	02/24/2014
MARK J. BURK	02/27/2014
JOHN D. TRAWICK	02/24/2014
MICHAEL P. KUCHINSKAS	02/24/2014
BRIAN STEER	02/24/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	GENOMATICA, INC.
<b>Street Address:</b>	10520 WATERIDGE CIRCLE
<b>City:</b>	SAN DIEGO
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	92121
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	13908907
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(858)314-1150
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	858-314-1200
<b>Email:</b>	cquatrino@jonesday.com, MVdiaz@jonesday.com
<b>Correspondent Name:</b>	JONES DAY
<b>Address Line 1:</b>	222 EAST 41ST STREET
<b>Address Line 4:</b>	NEW YORK, NEW YORK 10017-6702
<b>ATTORNEY DOCKET NUMBER:</b>	12956-191-999/871943-191
<b>NAME OF SUBMITTER:</b>	CHRISTINA QUATRINO
<b>SIGNATURE:</b>	/Christina Quatrino/
<b>DATE SIGNED:</b>	04/10/2014

PATENT

**Total Attachments: 5**

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## ASSIGNMENT

WHEREAS, WE, **Priit PHARKYA**, citizen of the United States, having a mailing address of 10520 Wateridge Circle, San Diego, CA 92121 residing at San Diego, CA, **Anthony P. BURGARD** citizen of the United States, having a mailing address of 10520 Wateridge Circle, San Diego, CA 92121 residing at Bellefonte, PA, **Stephen J. VAN DIEN**, citizen of the United States, having a mailing address of 10520 Wateridge Circle, San Diego, CA 92121 residing at Encinitas, CA, **Robin E. OSTERHOUT**, citizen of the United States, having a mailing address of 10520 Wateridge Circle, San Diego, CA 92121 residing at San Diego, CA, **Mark J. BURK**, citizen of the United States, having a mailing address of 10520 Wateridge Circle, San Diego, CA 92121 residing at San Diego, CA, **John D. TRAWICK**, citizen of the United States, having a mailing address of 10520 Wateridge Circle, San Diego, CA 92121 residing at La Mesa, CA, **Michael P. KUCHINSKAS**, citizen of the United States, having a mailing address of 10520 Wateridge Circle, San Diego, CA 92121 residing at Escondido, CA and **Brian STEER**, citizen of the United States, having a mailing address of 10520 Wateridge Circle, San Diego, CA 92121 residing at San Diego, CA, ASSIGNORS, are the inventors of the invention in **MICROORGANISMS AND METHODS FOR PRODUCTION OF 4-HYDROXYBUTYRATE, 1,4-BUTANEDIOL, AND RELATED COMPOUNDS** for which we have executed an application for a Patent of the United States:

- ☐ which is identified by Jones Day docket no. 12956-191-999 (CAM: 871943-999191)
- ☐ which was filed on June 3, 2013, Application No. 13/908,907

and WHEREAS, **Genomatica, Inc.**, a corporation organized and existing under the laws of the state of Delaware, and having an office for the transaction of business at 10520 Wateridge Circle, San Diego, CA 92121, ASSIGNEE, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement.

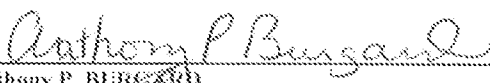
AND WE HEREBY authorize and request the Commissioner for Patents and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

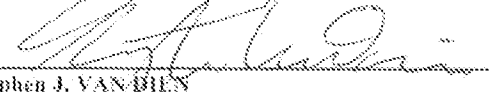
AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

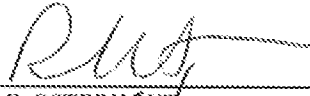
IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date 24 - Feb, 2014   
 Priit PHARKYA U.S.

Date 24 - Feb, 2014   
 Anthony P. BURGARD U.S.

Date 24 - Feb, 2014   
 Stephen J. VAN DIEN U.S.

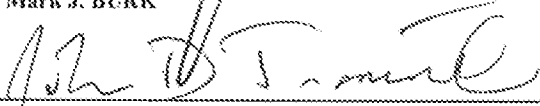
Date 24-Feb, 2014

  
\_\_\_\_\_  
Robin E. OSTERHOUDT L.S.

Date 27-Feb, 2014

  
\_\_\_\_\_  
Mark J. BURK L.S.

Date 24-Feb, 2014

  
\_\_\_\_\_  
John D. TRAWICK L.S.

Date 24-Feb, 2014

  
\_\_\_\_\_  
Michael P. KUCHINSKAS L.S.

Date 24-Feb, 2014

  
\_\_\_\_\_  
Brian STEER L.S.

STATE OF CALIFORNIA )

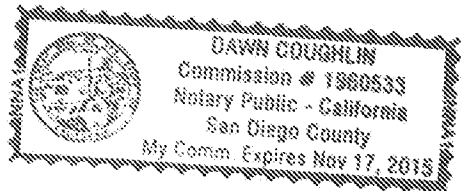
COUNTY OF San Diego )

On 2/24/14 before me, Dawn Coughlin, Notary Public, personally appeared Priti PHARKYA, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Dawn Coughlin (Seal)



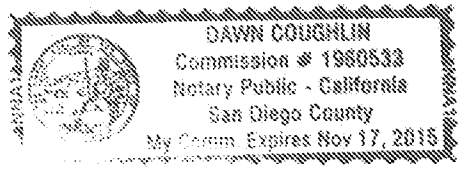
STATE OF )

COUNTY OF San Diego )

On 2/24/14 before me, Dawn Coughlin, Notary Public, personally appeared Anthony P. BURGARD, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature Dawn Coughlin (Seal)



STATE OF CALIFORNIA )

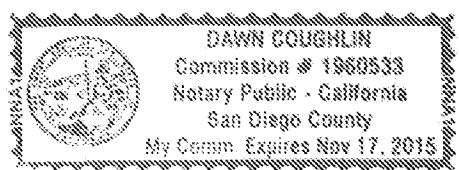
COUNTY OF San Diego )

On 2/24/14 before me, Dawn Coughlin, Notary Public, personally appeared Stephen J. VAN DIEN, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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STATE OF CALIFORNIA )

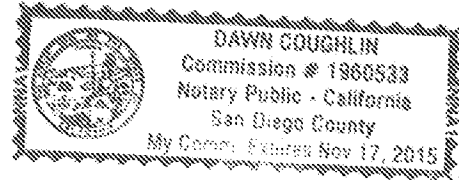
COUNTY OF San Diego )

On 2/24/14 before me, Dawn Coughlin, Notary Public, personally appeared **Robin E. OSTERHOUT**, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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Signature Dawn Coughlin (Seal)



STATE OF CALIFORNIA )

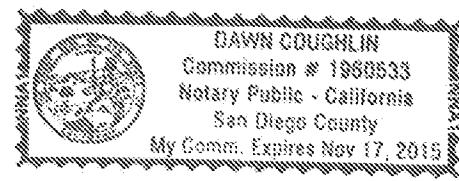
COUNTY OF San Diego )

On 2/27/14 before me, Dawn Coughlin, Notary Public, personally appeared **Mark J. BURK**, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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Signature Dawn Coughlin (Seal)



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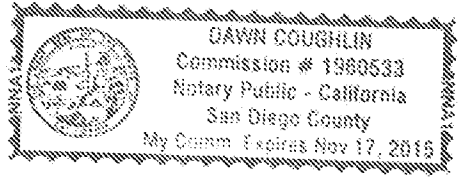
COUNTY OF San Diego )

On 2/24/14 before me, Dawn Coughlin, Notary Public, personally appeared **John D. TRAWICK**, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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Signature Dawn Coughlin (Seal)



STATE OF CALIFORNIA )

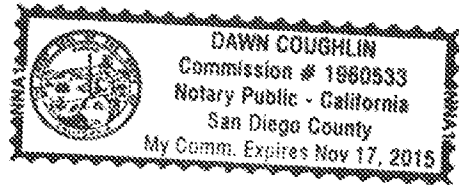
COUNTY OF San Diego )

On 2/24/14 before me, Dawn Coughlin, Notary Public, personally appeared **Michael P. KUCHINSKAS**, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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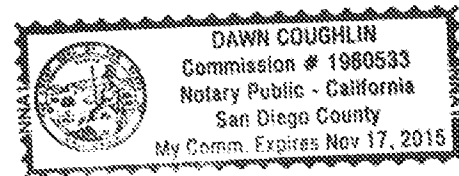
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WITNESS my hand and official seal.

Signature Dawn Coughlin (Seal)



ACCEPTED AND AGREED TO BY ASSIGNEE, **Genomatic, Inc.:**

Signature M. Howard

Date: 26 Feb 14

Printed name Mary Susan Howard

Title VP Legal Affairs