501923260 05/16/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Theodore G. Clark	05/15/2012
Ashot Papoyan	05/15/2012

RECEIVING PARTY DATA

Name:	Tetragenetics, Inc.
Street Address:	85 Bolton St.
City:	Cambridge
State/Country:	MASSACHUSETTS
Postal Code:	02140

PROPERTY NUMBERS Total: 3

Property Type	Number
Application Number:	61162059
Application Number:	13257903
PCT Number:	US2010028165

CORRESPONDENCE DATA

(212)230-8888 Fax Number:

Barish.Ozdamar@wilmerhale.com Email:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: Barish Ozdamar, Ph.D. Address Line 1: 399 Park Avenue WilmerHale Address Line 2:

Address Line 4: New York, NEW YORK 10022

ATTORNEY DOCKET NUMBER:	2202970.130 US2
NAME OF SUBMITTER:	Barish Ozdamar, Ph.D.

PATENT

REEL: 028220 FRAME: 0599

Total Attachments: 6

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ASSIGNMENT

WHEREAS, we, **Theodore G. CLARK**, being a citizen of the United States of America, residing at 206 Fairmont Street, Ithaca, New York 14850; and **Ashot PAPOYAN**, begin a citizen of Armenia, residing at 8 Asbury Road, Lansing, New York 14882; are inventors of certain new and useful inventions and discoveries, for which we have made an application for Letters Patent entitled **REGULATED SECRETION OF SOLUBLE HETEROLOGOUS PROTEINS IN CILIATES** which provisional patent application was filed in the United States Patent and Trademark Office on **March 20, 2009** and assigned Serial No. **61/162059**; and

For which an International Application entitled **PRODUCTION OF RECOMBINANT PROTEINS IN CILIATES AND USES THEREOF**, was filed in the United States Receiving Office on **March 22, 2010**, and assigned International Application No. **PCT/US10/28165**, designating the United States; and

For which an US Utility Application entitled **PRODUCTION OF RECOMBINANT PROTEINS IN CILIATES AND USES THEREOF**, was filed in the United States Patent and
Trademark Office on **September 20, 2011**, and assigned US Application No. **13/257903**; and

WHEREAS, Tetragenetics, Inc., having its principal place of business at 85 Bolton St., Cambridge, MA 02140, together with its successors and assigns is hereinafter called "ASSIGNEE," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited.

NOW, THEREFORE, for and in consideration of good and valuable consideration furnished by ASSIGNEE to us, receipt and sufficiency of which we hereby acknowledge, we hereby without reservations:

1. Assign, transfer, and convey to ASSIGNEE the entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part, and convention applications based in whole, or in part, upon said inventions or discoveries, or upon said

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applications, and any and all Letters Patents, reissues, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon, or arise from, said inventions, said discoveries, said applications, and said Letters Patent;

- 2. Authorize ASSIGNEE to file patent applications in any or all countries on any or all of said inventions and discoveries in my name or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable, under International Conventions or otherwise;
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments throughout the world to issue or transfer all said Letters Patents to ASSIGNEE, as assignee of the entire right, title, and interest therein or otherwise as ASSIGNEE may direct;
- 4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications, or patents, or any license to use the same, or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to ASSIGNEE without encumbrance;
- 5. Bind our heirs, legal representatives, and assigns, as well as ourselves, to do, upon ASSIGNEE's request and at ASSIGNEE's expense, but without additional consideration to us or them, all acts reasonably serving to assure that said inventions and discoveries, said patent applications, and said Letters Patents shall be held and enjoyed by ASSIGNEE as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives, and assigns if this Assignment had not been made; and particularly to execute and deliver to ASSIGNEE all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by ASSIGNEE; and to communicate to ASSIGNEE all facts known to me relating to said inventions and discoveries or the history thereof, and to testify as to the same in any court or proceeding; and to furnish ASSIGNEE any and all documents, photographs, models, samples, and other physical exhibits in my control or in the control of our heirs, legal representatives, or

and other physical exhibits in my control or in the control of our heirs, legal representatives, or assigns which may be useful for establishing the facts of my conceptions, disclosures, and reduction to practice of said inventions and discoveries.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal. DATE:____ Theodore G. CLARK On this ______ day of ______ (Month/Year), **Theodore G. CLARK**, personally known to me to be the same individual who executed the foregoing Assignment, and who acknowledged to me that execution of the same was of his own free will for the use and purposes therein set forth. WITNESS: IN TESTIMONY WHEREOF, I have hereunto set my hand and seal. DATE: 05/15/2012 Ashot PAPOYAN On this 15 day of May 2012 (Month/Year), Ashot PAPOYAN personally known to me to be the same individual who executed the foregoing Assignment, and who acknowledged to me that execution of the same was of his own free will for the use and purposes therein set forth. WITNESS: James Jandarlle

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ASSIGNMENT

WHEREAS, we, **Theodore G. CLARK**, being a citizen of the United States of America, residing at 206 Fairmont Street, Ithaca, New York 14850; and **Ashot PAPOYAN**, begin a citizen of Armenia, residing at 8 Asbury Road, Lansing, New York 14882; are inventors of certain new and useful inventions and discoveries, for which we have made an application for Letters Patent entitled **REGULATED SECRETION OF SOLUBLE HETEROLOGOUS PROTEINS IN CILIATES** which provisional patent application was filed in the United States Patent and Trademark Office on **March 20, 2009** and assigned Serial No. **61/162059**; and

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For which an US Utility Application entitled **PRODUCTION OF RECOMBINANT PROTEINS IN CILIATES AND USES THEREOF**, was filed in the United States Patent and Trademark Office on **September 20, 2011**, and assigned US Application No. **13/257903**; and

WHEREAS, Tetragenetics, Inc., having Error! Unknown document property name. principal placeError! Unknown document property name. of business at 85 Bolton St., Cambridge, MA 02140, together with its successors and assigns is hereinafter called "ASSIGNEE," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited.

NOW, THEREFORE, for and in consideration of good and valuable consideration furnished by ASSIGNEE to us, receipt and sufficiency of which we hereby acknowledge, we hereby without reservations:

1. Assign, transfer, and convey to ASSIGNEE the entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part, and convention

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applications based in whole, or in part, upon said inventions or discoveries, or upon said applications, and any and all Letters Patents, reissues, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon, or arise from, said inventions, said discoveries, said applications, and said Letters Patent;

- 2. Authorize ASSIGNEE to file patent applications in any or all countries on any or all of said inventions and discoveries in my name or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable, under International Conventions or otherwise;
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments throughout the world to issue or transfer all said Letters Patents to ASSIGNEE, as assignee of the entire right, title, and interest therein or otherwise as ASSIGNEE may direct;
- 4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications, or patents, or any license to use the same, or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to ASSIGNEE without encumbrance;
- 5. Bind our heirs, legal representatives, and assigns, as well as ourselves, to do, upon ASSIGNEE's request and at ASSIGNEE's expense, but without additional consideration to us or them, all acts reasonably serving to assure that said inventions and discoveries, said patent applications, and said Letters Patents shall be held and enjoyed by ASSIGNEE as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives, and assigns if this Assignment had not been made; and particularly to execute and deliver to ASSIGNEE all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by ASSIGNEE; and to communicate to ASSIGNEE all facts known to me relating to said inventions and discoveries or the history thereof, and to testify as to the same in any court or proceeding; and to furnish ASSIGNEE any and all documents, photographs, models, samples,

and other physical exhibits in my control or in the control of our heirs, legal representatives, or assigns which may be useful for establishing the facts of my conceptions, disclosures, and reduction to practice of said inventions and discoveries.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

DATE: 5/15/12 Standard S. Clark Theodore G. CLARK
On this 15 day of MAY 2012 (Month/Year), Theodore G. CLARK , personally known to me to be the same individual who executed the foregoing Assignment, and who acknowledged to me that execution of the same was of his own free will for the use and purposes therein set forth. WITNESS:
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.
DATE: Ashot PAPOYAN
On this day of (Month/Year), Ashot PAPOYAN personally known to me to be the same individual who executed the foregoing Assignment, and who acknowledged to me that execution of the same was of his own free will for the use and purposes therein set forth.
WITNESS:

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