504585201 10/09/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4631913

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DEBORAH LEE ZIMMERMAN	10/31/2007
W. MICHAEL KAVANAUGH	11/29/2007
GREGORY MARTIN HARROWE	10/16/2007
CHENG LIU	10/17/2007
KIRSTON KOTHS	10/12/2007
LI LONG	10/09/2007
MARIA CALDERON-CACIA	10/29/2007

RECEIVING PARTY DATA

Name:	NOVARTIS VACCINES AND DIAGNOSTICS, INC.	
Street Address:	4560 HORTON STREET	
City:	EMERYVILLE	
State/Country:	CALIFORNIA	
Postal Code:	94608	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15347171

CORRESPONDENCE DATA

Fax Number: (312)474-0448

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: 312-474-6300

Email: kdola@marshallip.com

Correspondent Name: MARSHALL, GERSTEIN & BORUN LLP

Address Line 1: 233 S. WACKER DRIVE Address Line 2: 6300 WILLIS TOWER

Address Line 4: CHICAGO, ILLINOIS 60606

ATTORNEY DOCKET NUMBER:	27527/40666C
NAME OF SUBMITTER:	KRISTEN A. DOLA
SIGNATURE:	/Kristen A. Dola/
DATE SIGNED:	10/09/2017

Total Attachments: 19 source=40666C_NovartisAssignment#page1.tif source=40666C NovartisAssignment#page2.tif source=40666C_NovartisAssignment#page3.tif source=40666C_NovartisAssignment#page4.tif source=40666C_NovartisAssignment#page5.tif source=40666C_NovartisAssignment#page6.tif source=40666C_NovartisAssignment#page7.tif source=40666C_NovartisAssignment#page8.tif source=40666C NovartisAssignment#page9.tif source=40666C_NovartisAssignment#page10.tif source=40666C_NovartisAssignment#page11.tif source=40666C NovartisAssignment#page12.tif source=40666C NovartisAssignment#page13.tif source=40666C NovartisAssignment#page14.tif source=40666C_NovartisAssignment#page15.tif source=40666C_NovartisAssignment#page16.tif source=40666C NovartisAssignment#page17.tif source=40666C NovartisAssignment#page18.tif source=40666C NovartisAssignment#page19.tif

WHEREAS, We, Deborah Lee Zimmerman, Gregory Martin Harrowe, Cheng Liu, Kirston Koths. W. Michael Kavanaugh, Li Long, and Maria Calderon-Cacia, hereinafter referred to as ASSIGNORS, have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

M-CSF-SPECIFIC MONOCLONAL ANTIBODY AND USES THEREOF

Date(s) of Execution:

October 12, 2007

Filing Date: July 7, 2006

Serial No:

10/585,459

WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS, INC., 4560 Horton Street, Emeryville, California 94608-2916, a corporation of the State of Delaware, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in the above invention and application and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for and in consideration of the sum of One Dollar (\$1.00) lawful money paid to ASSIGNORS by ASSIGNEE, receipt of which is hereby acknowledged, ASSIGNORS have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said ASSIGNEE, and ASSIGNEE'S successors and assigns, all right, title and interest in and to the said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions (including conversions claiming priority under 35 U.S.C. §119(e)), reissues, prolongations or extensions thereof, the said interest to be held and enjoyed by said ASSIGNORS had this assignment and transfer not been made, to the full end and term of any Letters Patent.

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ASSIGNORS further agree that they will, without charge to said ASSIGNEE, but at ASSIGNEE'S expense, cooperate with ASSIGNEE in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as ASSIGNEE lawfully may request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said ASSIGNEE, or ASSIGNEE'S successors and assigns.

DATE	
	Deborah Lee Zimmerman
	Witness Signature
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	Gregory Martin Harrowe
	Witness Signature
DATE	
	Cheng Liu
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DATE _	acholo 12,2007 Inopi Lotos
	Kirston Koths Witness Signature
DATE _	
	W. Michael Kavanaugh
DATE _	
	Li Long
	Witness Signature
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unida	Maria Calderon-Cacia

Witness Signature

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Title of Invention:

M-CSF-SPECIFIC MONOCLONAL ANTIBODY AND USES THEREOF

Date(s) of Execution:

October 31, 2007

Filing Date: July 7, 2006

Serial No:

November 29, 2007

10/585,459

WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS, INC., 4560 Horton Street, Emeryville, California 94608-2916, a corporation of the State of Delaware, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in the above invention and application and in any Letters Patent which may be granted on the same;

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Witness Signature

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	Kirston Koths
·	Witness Signature
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	W. Michael Kavanawgh
DATE	
	Li Long
	Witness Signature
DATE	
	Maria Calderon-Cacia
	Witness Signature

State of California

County of Alameda

On November 29, 2007 before me, Elissa M. Nash, personally appeared W. Michael Kavanaugh, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Elissa M. Nash

ELISSA M. NASH
Commission # 1553873
Notary Public - California
Alameda County
My Comm. Expires Feb 19, 2009

WHEREAS, We, Deborah Lee Zimmerman, Gregory Martin Harrowe, Cheng Liu, Kirston Koths, W. Michael Kavanaugh, Li Long, and Maria Calderon-Cacia, hereinafter referred to as ASSIGNORS, have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

M-CSF-SPECIFIC MONOCLONAL ANTIBODY AND USES THEREOF

Date(s) of Execution:

October 9, 2007

Filing Date: July 7, 2006

Serial No:

10/585,459

WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS, INC., 4560 Horton Street, Emeryville, California 94608-2916, a corporation of the State of Delaware, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in the above invention and application and in any Letters Patent which may be granted on the same;

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	Deborah Lee Zimmerman
	Witness Signature
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DATE	Gregory Martin Harrowe
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	C'heng Liu
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DATE _		Kirston Koths
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		W. Michael Kavanaugh
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	- Ol	Li Long
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		Maria Calderon-Cacia
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WHEREAS, We, Deborah Lee Zimmerman, Gregory Martin Harrowe, Cheng Liu, Kirston Koths, W. Michael Kavanaugh, Li Long, and Maria Calderon-Cacia, hereinafter referred to as ASSIGNORS, have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

M-CSF-SPECIFIC MONOCLONAL ANTIBODY AND USES THEREOF

Date(s) of Execution:

October 16, 2007

Filing Date: July 7, 2006

Serial No:

10/585,459

WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS, INC., 4560 Horton Street, Emeryville, California 94608-2916, a corporation of the State of Delaware, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in the above invention and application and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for and in consideration of the sum of One Dollar (\$1.00) lawful money paid to ASSIGNORS by ASSIGNEE, receipt of which is hereby acknowledged, ASSIGNORS have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said ASSIGNEE, and ASSIGNEE'S successors and assigns, all right, title and interest in and to the said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions (including conversions claiming priority under 35 U.S.C. §119(e)), reissues, prolongations or extensions thereof, the said interest to be held and enjoyed by said ASSIGNEE as fully and exclusively as it would have been held and enjoyed by said ASSIGNORS had this assignment and transfer not been made, to the full end and term of any Letters Patent.

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DATE	
	Deborah Lee Zimmerman
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DATE _	10/16/07 Leg Janous Gregory Martin Harrowe
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DAIL	Cheng Liu
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	Kirston Koths
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	Maria Calderon-Cacia
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WHEREAS, We, Deborah Lee Zimmerman, Gregory Martin Harrowe, Cheng Liu, Kirston Koths, W. Michael Kavanaugh, Li Long, and Maria Calderon-Cacia, hereinafter referred to as ASSIGNORS, have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

M-CSF-SPECIFIC MONOCLONAL ANTIBODY AND USES THEREOF

Date(s) of Execution: October 17, 2007

Filing Date: July 7, 2006

Serial No:

10/585,459

WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS, INC., 4560 Horton Street, Emeryville, California 94608-2916, a corporation of the State of Delaware, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in the above invention and application and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for and in consideration of the sum of One Dollar (\$1.00) lawful money paid to ASSIGNORS by ASSIGNEE, receipt of which is hereby acknowledged, ASSIGNORS have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said ASSIGNEE, and ASSIGNEE'S successors and assigns, all right, title and interest in and to the said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions (including conversions claiming priority under 35 U.S.C. §119(e)), reissues, prolongations or extensions thereof, the said interest to be held and enjoyed by said ASSIGNEE as fully and exclusively as it would have been held and enjoyed by said ASSIGNORS had this assignment and transfer not been made, to the full end and term of any Letters Patent.

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	Deborah Lee Zimmerman
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	Gregory Martin Harrowe
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	Cheng Liu
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Title of Invention:

M-CSF-SPECIFIC MONOCLONAL ANTIBODY AND USES THEREOF

Date(s) of Execution: October 29, 2007

Filing Date: July 7, 2006

Serial No:

10/585,459

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	Kirston Koths
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	Maria Calderon-Cacia
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