504875077 04/18/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4921817

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZYMOGENETICS, LLC	02/06/2015

RECEIVING PARTY DATA

Name:	THE MEDICINES COMPANY
Street Address:	8 SYLVAN WAY
City:	PARSIPPANY
State/Country:	NEW JERSEY
Postal Code:	07054

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	15463715
Application Number:	15463698

CORRESPONDENCE DATA

Fax Number: (312)827-8185

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: 312-372-1121

Email: chicago.patents@klgates.com

Correspondent Name: K&L GATES LLP Address Line 1: P. O. BOX 1135

Address Line 4: CHICAGO, ILLINOIS 60690-1135

ATTORNEY DOCKET NUMBER:	3712044.05221/5222
NAME OF SUBMITTER:	KELLY A. PLUMMER
SIGNATURE:	/Kelly A. Plummer/
DATE SIGNED:	04/18/2018

Total Attachments: 22

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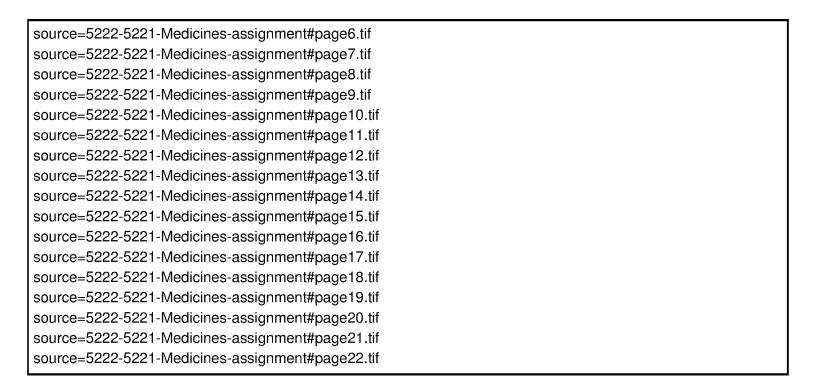
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PATENT REEL: 045969 FRAME: 0857



PATENT REEL: 045969 FRAME: 0858

Patent Assignment Agreement

This Patent Assignment Agreement (this "<u>Agreement</u>"), dated as of February 6, 2015, is made and entered into by and among BRISTOL-MYERS SQUIBB COMPANY, a Delaware corporation ("<u>BMS</u>"), ZYMOGENETICS, INC., a Washington corporation, ZYMOGENETICS, LLC, a Delaware limited liability company (together with BMS, "<u>Assignors</u>"), and THE MEDICINES COMPANY, a Delaware corporation ("<u>Assignee</u>") (each a "<u>Party</u>," and together, the "<u>Parties</u>").

- A. Pursuant to that certain Master Transaction Agreement between BMS and Assignee, dated as of December 11, 2012 (the "Master Transaction Agreement"), among other things, BMS has agreed to, and to cause the Selling Affiliates to, sell, assign, transfer, convey and deliver to Assignee all the right, title and interest of BMS and the Selling Affiliates in, to and under the Acquired Assets (including the Transferred Patent Rights) in consideration for the payment by Assignee of the Purchase Price and the assumption by Assignee of the Assumed Liabilities (all capitalized terms used but not defined herein shall have the meanings given such terms in the Master Transaction Agreement); and
- B. As a condition to the Purchase Closing, the Parties agreed to enter into this Agreement pursuant to which each Assignor shall assign to Assignee all of such Assignor's right, title and interest in, to and under the Transferred Patent Rights.

NOW THEREFORE, for good and valuable consideration, , the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

- 1. <u>Assignment</u>. Each Assignor hereby sells, assigns, conveys, transfers and delivers to Assignee, its successors and assigns, all of such Assignor's right, title and interest in, to and under the Transferred Patent Rights (attached hereto as <u>Schedule A</u>).
- 2. <u>Due Authorization</u>. Each Assignor hereby authorizes and requests the Commissioner of Patents of the United States and any official of any state or foreign country whose duty it is to issue intellectual property registrations, to issue all registrations from any applications for registration included in the Transferred Patent Rights to Assignee.
- 3. <u>Governing Law</u>. This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York applicable to agreements made and to be performed entirely within such State, without regard to the conflicts of law principles of such State. This Agreement may not be waived or amended except by an instrument in writing signed on behalf of each of BMS and Assignee.
- 4. <u>Counterparts</u>. This Agreement may be executed in one or more counterparts, and by the different parties hereto in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same agreement.

[Signature Page Follows]

NY: 781150-1

PATENT REEL: 0359**β፯ ፑድብ州**E: 0726 REEL: 045969 FRAME: 0859 IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

BRISTOL-MYERS SQUIBB COMPANY

Name: P. Joseph Campisi, Jr.
Vice President & Associate
General Counsel

ZYMOGENETICS, INC.

By: Name: P. Joseph Campisi, Jr. Title: Authorized Signatory

ZYMOGENETICS, LLC

By: Name: P Joseph Campisi, Jr.
Title: Authorized Signatory

THE MEDICINES COMPANY

[Signature Page to Patent Assignment Agreement]

PATENT

REEL: 0359

Patent Assignment Agreement

This Patent Assignment Agreement (this "<u>Agreement</u>"), dated as of February 6, 2015, is made and entered into by and among BRISTOL-MYERS SQUIBB COMPANY, a Delaware corporation ("<u>BMS</u>"), ZYMOGENETICS, INC., a Washington corporation, ZYMOGENETICS, LLC, a Delaware limited liability company (together with BMS, "<u>Assignors</u>"), and THE MEDICINES COMPANY, a Delaware corporation ("<u>Assignee</u>") (each a "<u>Party</u>," and together, the "Parties").

- A. Pursuant to that certain Master Transaction Agreement between BMS and Assignee, dated as of December 11, 2012 (the "Master Transaction Agreement"), among other things, BMS has agreed to, and to cause the Selling Affiliates to, sell, assign, transfer, convey and deliver to Assignee all the right, title and interest of BMS and the Selling Affiliates in, to and under the Acquired Assets (including the Transferred Patent Rights) in consideration for the payment by Assignee of the Purchase Price and the assumption by Assignee of the Assumed Liabilities (all capitalized terms used but not defined herein shall have the meanings given such terms in the Master Transaction Agreement); and
- B. As a condition to the Purchase Closing, the Parties agreed to enter into this Agreement pursuant to which each Assignor shall assign to Assignee all of such Assignor's right, title and interest in, to and under the Transferred Patent Rights.

NOW THEREFORE, for good and valuable consideration, , the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

- 1. <u>Assignment</u>. Each Assignor hereby sells, assigns, conveys, transfers and delivers to Assignee, its successors and assigns, all of such Assignor's right, title and interest in, to and under the Transferred Patent Rights (attached hereto as <u>Schedule A</u>).
- 2. <u>Due Authorization</u>. Each Assignor hereby authorizes and requests the Commissioner of Patents of the United States and any official of any state or foreign country whose duty it is to issue intellectual property registrations, to issue all registrations from any applications for registration included in the Transferred Patent Rights to Assignee.
- 3. <u>Governing Law</u>. This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York applicable to agreements made and to be performed entirely within such State, without regard to the conflicts of law principles of such State. This Agreement may not be waived or amended except by an instrument in writing signed on behalf of each of BMS and Assignee.
- 4. <u>Counterparts</u>. This Agreement may be executed in one or more counterparts, and by the different parties hereto in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same agreement.

[Signature Page Follows]

NY: 781150-1

PATENT REEL: 035988 FRAME: 0728

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

BRISTOL-MYERS SQUIBB COMPANY

By:	
•	Name:
	Title:
ZYI	MOGENETICS, INC.
	,
Ву:	
	Name:
	Title:
ZYI	MOGENETICS, LLC
D ₁₇ .	į.
	Name:
	Title:

THE MEDICINES COMPANY

r: //

Tame: Stephen Ro

Title: SVP + Control Coursel

Schedule A

Patents

See attached.

PATENT REEL: 0359**န_{ို} កុខ្**សុហុE: 0730

Transferred Patent Rights

Z00807-US- PSP[1]	Z00804-US- PSP[2]	Z00804-US- PSP[1]	Z00803-US- PSP[1]	Z00708-US- PSP[1]	Z00508-US- PSP[2]	Z00508-US- PSP[1]	Z00401-US- PSP[1]	Dockel Number
SPRAY TIP APPARATUS AND METHODS FOR ITS USE	HEMOSTATIC MICROSPHERES	HEMOSTATIC MICROSPHERES	THROMBIN ACTIVATOR COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME	STABILIZED THROMBIN COMPOSITIONS	METHOD FOR ACTIVATING PRETHROMBIN-1	METHOD FOR ACTIVATING PRETHROMBIN-1	THROMBIN COMPOSITIONS	Title
Expiry date	Expiry date	Expiry date	Expiry date	Expiry date	Expiry date	Expiry date	Expiry date	Case Status
61/125504	61/150466	61/042156	61/043054	60/944224	60/870746	60/753914	60/581824	Filing No.
								Publication Number
								Grant Number
								O & ne o

PATENT REEL: 0359βጿ ቸይለነቸE: 0731 REEL: 045969 FRAME: 0864

Z00401-EP-EPT	Z00401-DK-EPT	Z00401-DE- ETD[1]	Z00401-DE-EPT	Z00401-CH-EPT	Z00401-CA-PCT	Z00401-BE-EPT	Z00401-AU-PCT	Z00401-AU- DIV[1]	Z00401-AT-EPT	Docket Number
THROMBIN COMPOSITIONS	Title									
Grant	Case Status									
05766031.8	05766031.8	08004770.7	05766031.8	05766031.8	2570478	05766031.8	2005265251	2009238369	05766031.8	Filing No.
1766003	1766003	1927658	1766003	1766003		1766003			1766003	Publication Number
1766003	1766003	60200503652 5.7	1766003	1766003	2570478	1766003	2005265251	2009238369	E405643	Grant Number
ZymoGenetics, Inc.	Owner									

PATENT REEL: 0359**βጷ ፑድለ州**E: 0732

Z004	Z004	Z004	Z00	Z004	Z0(Z004	Z0(Z004	Z0(Dock
Z00401-IN-PCD	Z00401-IL-PCT	Z00401-IE-EPT	Z00401-GB- ETD[1]	Z00401-GB-EPT	Z00401-FR- ETD[1]	Z00401-FR-EPT	Z00401-ES- ETD[1]	Z00401-ES-EPT	Z00401-EP- ETD[1]	Docket Number
THROMBIN COMPOSITIONS	THROMBIN COMPOSITIONS	THROMBIN COMPOSITIONS	THROMBIN COMPOSITIONS	THROMBIN COMPOSITIONS	THROMBIN COMPOSITIONS	THROMBIN COMPOSITIONS	THROMBIN COMPOSITIONS	THROMBIN COMPOSITIONS	THROMBIN COMPOSITIONS	Title
Publication of application	Grant	Case Status								
1863/CHENP/2 011	179852	05766031.8	08004770.7	05766031.8	08004770.7	05766031.8	08004770.7	05766031.8	08004770.7	Filing No.
1863/CHENP/201 1A		1766003	1927658	1766003	1927658	1766003	1927658	1766003	1927658	Publication Number
	179852	1766003	1927658	1766003	1927658	1766003	1927658	1766003	1927658	Grant Number
ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	Owner

PATENT REEL: 035988 FEAME: 0733

Z00508-AT-EPT METHOD FOR Grant 06846013.8 1966371 1966371 ACTIVATING PRETHROMBIN-1	Z00401-WO-PCT THROMBIN PCT US05/021743 06/009989 COMPOSITIONS CONVERTED	Z00401-US-NP THROMBIN Grant 11/157707 20060002918 7393674	Z00401-US- THROMBIN Grant 11/539276 20070104705 7473543 CNT[1] COMPOSITIONS	Z00401-NL-EPT THROMBIN Grant 05766031.8 1766003 1766003	Z00401-LU-EPT THROMBIN Grant 05766031.8 1766003 1766003	Z00401-JP-PCT THROMBIN Grant 2007-518171 2008-503240 4767253 COMPOSITIONS	Z00401-IT-ETD[1] THROMBIN Grant 08004770.7 1927658 1927658	Z00401-IT-EPT THROMBIN Grant 05766031.8 1766003 1766003	Z00401-IN-PCT THROMBIN Grant 256/CHENP/20 247493	Docket Number Little Case Status Filing No. Frublication Number Number Number
71 ZymoGenetics, Inc.	ZymoGenetics, Inc.	74 Zymogenetics, llc	2ymogenetics, llc	03 ZymoGenetics, Inc.	03 ZymoGenetics, Inc.	53 ZymoGenetics, Inc.	58 ZymoGenetics, Inc.	03 ZymoGenetics, Inc.	ZymoGenetics, Inc.	er Owner

ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-DE-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-CZ-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-CY-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-CH-EPT
ZymoGenetics, Inc.	2631715		2631715	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-CA-PCT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-BG-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-BE-EPT
ZymoGenetics, Inc.	2006330923		2006330923	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-AU-PCT
Owner	Grant Number	Publication Number	Filling No.	Case Status	Title	Docket Number

PATENT REEL: 0359**βዲ ፑድብ州**E: 0735 REEL: 045969 FRAME: 0868

ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-GR-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-GB-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-FR-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-FI-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-ES-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-EP-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-EE-EPT
ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-DK-EPT
Owner	Grant Number	Publication Number	Filing No.	Case Status	Fitte	Docket Number

PATENT REEL: 0359**88 FEMM**E: 0736

Z00508-LT-EPT METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-JP-PCT METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-IT-EPT METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-IS-EPT METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-IN-PCT METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-IL-PCT METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-1E-EPT METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-HU-EPT METHOD FOR ACTIVATING PRETHROMBIN-1	Docket Number Title
DD FOR ATING OMBIN-1	DD FOR ATING OMBIN-1	METHOD FOR ACTIVATING ETHROMBIN-1	DD FOR ATING OMBIN-1	METHOD FOR ACTIVATING RETHROMBIN-1	METHOD FOR ACTIVATING RETHROMBIN-1	METHOD FOR ACTIVATING RETHROMBIN-1	METHOD FOR ACTIVATING 1ETHROMBIN-1	<u>=</u>
Grant	Grant	Grant	Grant	Local filing	Local filing	Grant	Grant	Case Status
06846013.8	2008-547622	06846013.8	06846013.8	3822/CHENP/2 008	191818	06846013.8	06846013.8	Filing No.
1966371	2009-521226	1966371	1966371			1966371	1966371	Publication Number
1966371	5167146	1966371	1966371			1966371	1966371	Grant Number
ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	Owner

PATENT REEL: 035984FRAME: 0737 REEL: 045969 FRAME: 0870

PATENT REEL: 0359**β& ፑድብሃ**IE: 0738 REEL: 045969 FRAME: 0871

	ZymoGenetics, Inc.	2167041	2167041	08780809.3	Grant	STABILIZED THROMBIN COMPOSITIONS	Z00708-EP-EPT
	ZymoGenetics, Inc.	2167041	2167041	08780809.3	Grant	STABILIZED THROMBIN COMPOSITIONS	Z00708-DE-EPT
	ZymoGenetics, Inc.			2687968	Local filing	STABILIZED THROMBIN COMPOSITIONS	Z00708-CA-PCT
'	ZymoGenetics, Inc.	2008266094		2008266094	Grant	STABILIZED THROMBIN COMPOSITIONS	Z00708-AU-PCT
	ZymoGenetics, Inc.		07/076033	US06/049076	Expiry date	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-WO-PCT
	Zymogenetics, llc	8062876	US20080293122A 1	12/097027	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-US-PCT
<u> </u>	ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-TR-EPT
<u> </u>	ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-SK-EPT
PATEN	ZymoGenetics, Inc.	1966371	1966371	06846013.8	Grant	METHOD FOR ACTIVATING PRETHROMBIN-1	Z00508-SI-EPT
	Owner	Grant Number	Publication Number	Filling No.	Case Status	Tille	Dockel Number

PATENT REEL: 03598% FEAME: 0739 REEL: 045969 FRAME: 0872

ZymoGenetics, Inc.			2009233899	Abandoned	THROMBIN ACTIVATOR COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME	Z00803-AU-PCT
ZymoGenetics, Inc.		08/157304	US08/066850	Expiry date	STABILIZED THROMBIN COMPOSITIONS	Z00708-WO-PCT
Zymogenetics, llc	8071090	US20080311104A	12/138922	Grant	STABILIZED THROMBIN COMPOSITIONS	Z00708-US-NP
ZymoGenetics, Inc.	5253501	2010-529997	2010-512373	Grant	STABILIZED THROMBIN COMPOSITIONS	Z00708-JP-PCT
ZymoGenetics, Inc.	2167041	2167041	08780809.3	Grant	STABILIZED THROMBIN COMPOSITIONS	Z00708-IT-EPT
ZymoGenetics, Inc.			245/CHENP/20 10	Local filing	STABILIZED THROMBIN COMPOSITIONS	Z00708-IN-PCT
ZymoGenetics, Inc.	202306		202306	Grant	STABILIZED THROMBIN COMPOSITIONS	Z00708-IL-PCT
ZymoGenetics, Inc.	2167041	2167041	08780809.3	Grant	STABILIZED THROMBIN COMPOSITIONS	Z00708-GB-EPT
ZymoGenetics, Inc.	2167041	2167041	08780809.3	Grant	STABILIZED THROMBIN COMPOSITIONS	Z00708-FR-EPT
ZymoGenetics, Inc.	2167041	2167041	08780809.3	Grant	STABILIZED THROMBIN COMPOSITIONS	Z00708-ES-EPT
Owner	Grant Number	Publication Number	Filing No.	Case Status	Title	Docket Number

PATENT REEL: 0359**βጿ ቸይሉM**E: 0740 REEL: 045969 FRAME: 0873

Z00803-US-PCT THROMBIN ACTIVATOR Grant 12/935235 US20110151536A 8759066 COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME	Z00803-JP-PCT THROMBIN ACTIVATOR Abandoned 2011-504124 2011-516081 COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME	Z00803-IN-PCT THROMBIN ACTIVATOR Abandoned 6316/CHENP/1 6316/CHENP/201 COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME	Z00803-IL-PCT THROMBIN ACTIVATOR Abandoned 207540 COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME	Z00803-EP-EPT THROMBIN ACTIVATOR Abandoned 09731098.1 2271675 COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME	Z00803-CA-PCT THROMBIN ACTIVATOR Abandoned 2716738 COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME	Docket Number Title Case Status Filing No. Publication Grant Number Number
66 Zymogenetics, llc	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	Owner

PATENT REEL: 0359**βጿ FBਨ୍ନ州**E: 0741

Z00804-WO-PCT HEMOSTATIC Expiry date PCT/US09/038 09 MICROSPHERES 320	Z00804-US-PCT HEMOSTATIC Publication of 12/935114 US20-	Z00804-JP-PCT HEMOSTATIC Grant 2011-503043 201	Z00804-IN-PCT HEMOSTATIC Publication of 6232/CHENP/2 6232/ MICROSPHERES application 010	Z00804-IL-PCT HEMOSTATIC Local filing 207709 MICROSPHERES	Z00804-EP-EPT HEMOSTATIC Publication of 09728223.0 2 MICROSPHERES application	Z00804-CA-PCT HEMOSTATIC Local filing 2716010 MICROSPHERES	Z00804-AU-PCT HEMOSTATIC Local filing 2009232000 MICROSPHERES	AND USING THE SAME
PCT/US09/038	12/935114	2011-503043	6232/CHENP/2 010		09728223.0			
09/038320	US20110125089A	2011-518780 5562324	6232/CHENP/201 0A		2265728			
ZymoGenetics, Inc.	Zymogenetics, llc	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	Zymogenetics, inc.

PATENT REEL: 035988 FBAME: 0742

ZymoGenetics, Inc.		6813/CHENP/10	6813/CHENP/1 0	Abandoned	MEDICAL DEVICES FOR DELIVERING FLUIDS DURING SURGERY AND METHODS FOR THEIR USE	Z00807-IN-PCT
ZymoGenetics, Inc.			208653	Abandoned	MEDICAL DEVICES FOR DELIVERING FLUIDS DURING SURGERY AND METHODS FOR THEIR USE	Z00807-1L-PCT
ZymoGenetics, Inc.		2271267	09734534.2	Publication of application	MEDICAL DEVICES FOR DELIVERING FLUIDS DURING SURGERY AND METHODS FOR THEIR USE	Z00807-EP-EPT
ZymoGenetics, Inc.			2721462	Local filing	MEDICAL DEVICES FOR DELIVERING FLUIDS DURING SURGERY AND METHODS FOR THEIR USE	Z00807-CA-PCT
ZymoGenetics, Inc. PATENT			2009240441	Local filing	MEDICAL DEVICES FOR DELIVERING FLUIDS DURING SURGERY AND METHODS FOR THEIR USE	Z00807-AU-PCT
Owner	Grant Number	Publication Number	Filing No.	Case Status	Title	Docket Number

PATENT REEL: 0359**βλ ΓΕΛΙ**ΜΕ: 0743

MEDICAL DEVICES FOR DELIVERING FLUIDS DURING SURGERY AND METHODS FOR THEIR USE PRODUCING THROMBIN MEDICAL DEVICES FOR Abandoned Surgery AND METHODS FOR THEIR USE MEDICAL DEVICES FOR Publication of DELIVERING SURGERY AND METHODS FOR THEIR USE MEDICAL DEVICES FOR Publication of DELIVERING SURGERY AND METHODS FOR THEIR USE MEDICAL DEVICES FOR Abandoned 12/988353 US20110166550A 2ymoGenetics, lic DELIVERING SURGERY AND METHODS FOR THEIR USS. MEDICAL DEVICES FOR Expiry date US09/041772 09/132331 US20110166550A 2ymoGenetics, lic DELIVERING SURGERY AND METHODS FOR THEIR USS. METHODS FOR THEIR SURGERY AND METHODS FOR THEIR US09/041772 09/132331 US09/041772 US09								
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MEDICAL DEVICES FOR DELIVERING FLUIDS DURING SURGERY AND METHODS FOR THEIR SURGERY AND METHODS FOR THEIR DELIVERING FLUIDS FOR THEIR GRAPH AND METHODS FOR THEIR GRAPH AND METHOD	5	ZymoGenetics, Inc	0624199	0624199	93902869.2	Grant	METHODS FOR PRODUCING THROMBIN	Z09115-BE-EPT
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Title Case Status Filing No. Publication Grant Owner Number Number		ZymoGenetics, Inc		2011-518621	2011-506492	Abandoned	MEDICAL DEVICES FOR DELIVERING FLUIDS DURING SURGERY AND METHODS FOR THEIR USE	Z00807-JP-PCT
	<u> </u>	Owner	Grant Number	Publication Number	Filing No.	Case Status	Title	Dockel Number

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Z09115-US- CIP[1]	Z09115-SE-EPT	Z09115-PT-EPT	Z09115-NO-PCT	Z09115-NL-EPT	Z09115-MC-EPT	Z09115-LU-EPT	Z09115-JP-PCT	Z09115-IT-EPT	Docket Number
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	0624199	0624199		0624199	0624199	0624199	7-502659	0624199	Publication Number
	0624199	0624199	317018	0624199	0624199	0624199	3404038	0624199	Grant Number
	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	ZymoGenetics, Inc.	Owner

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ZymoGenetics, Inc.	WO1993/013208	PCT/US1992/0 11357	PCT CONVERTED	METHODS FOR PRODUCING THROMBIN	Z09115-WO-PCT
		07/816281	Abandoned	METHODS FOR PRODUCING THROMBIN	Z09115-US-NP
5502034	5.	08/463953	Expiry date	METHODS FOR PRODUCING THROMBIN	Z09115-US- DIV[2]
5527692	5	08/462261	Expiry date	METHODS FOR PRODUCING THROMBIN	Z09115-US- DIV[1]
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RECORDED: 06/22/2015 RECORDED: 04/18/2018 PATENT REEL: 035988 FEAME: 0747