PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

EPAS ID: PAT4114528

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARY CHAVES	05/13/2016
MATTHEW BIO	05/20/2016
MATTHEW PETERSON	05/18/2016

RECEIVING PARTY DATA

Name:	AMGEN INC.
Street Address:	ONE AMGEN CENTER DR.
City:	THOUSAND OAKS
State/Country:	CALIFORNIA
Postal Code:	91320

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15101373

CORRESPONDENCE DATA

Fax Number:

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: 805-447-7926

Email: podgorny@amgen.com

Correspondent Name: AMGEN INC

Address Line 1: ONE AMGEN CENTER DR.

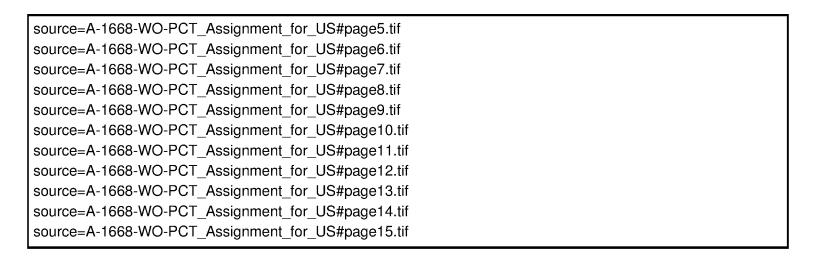
Address Line 4: THOUSAND OAKS, CALIFORNIA 91320

ATTORNEY DOCKET NUMBER:	A-1668-US-PCT
NAME OF SUBMITTER:	KAREN PODGORNY
SIGNATURE:	/Karen Podgorny/
DATE SIGNED:	10/26/2016

Total Attachments: 15

source=A-1668-WO-PCT_Assignment_for_US#page1.tif source=A-1668-WO-PCT_Assignment_for_US#page2.tif source=A-1668-WO-PCT_Assignment_for_US#page3.tif source=A-1668-WO-PCT_Assignment_for_US#page4.tif

PATENT 504067862 REEL: 040139 FRAME: 0667



PATENT REEL: 040139 FRAME: 0668

ASSIGNMENT

Whereas, I/we, Mary CHAVES, 51 Webster St, Arlington, MA 02474 US

Matthew BIO, 433 E. Micheltorena Street, Santa Barbara, CA 93101 US

Matthew PETERSON, 433 E. Micheltorena Street, Santa Barbara, CA 93101
US

(hereinafter referred to as ASSIGNOR), have made an invention which is the subject of an application for Letters Patent of the United States; and/or is the subject of a provisional application; and/or is the subject of an international application; and/or is the subject of other patent application(s) in other jurisdictions worldwide ("Application") entitled

Crystalline Forms of N-(4-((3-(2-Amino-4-Pyrimidinyl)-2-Pyridinyl)Oxy)Phenyl)-4-(4-Methyl - 2-Thienyl)-1-Phthalazinamine Salts and Uses Thereof

which is found in:

☑ International Application No. PCT/US2014/067385 filed 25 Nov 2014; which claims the benefit of U.S. Provisional Application No. 61/911,341 filed 03 Dec 2013.

Whereas AMGEN INC., a Delaware corporation having its principal place of business at One Amgen Center Drive, Thousand Oaks, California 91320-1799 wishes to acquire the entire right, title, and interest in all inventions disclosed in such Application;

Now, therefore, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns, transfers and sets over unto AMGEN INC., its successors and assigns (collectively "ASSIGNEE") ASSIGNOR'S entire right, title and interest in, to and under the Application, and any provisional application(s) from which Application is derived, and all priority rights to which the Application may be entitled, including all priority rights for other countries arising therefrom, all inventions therein disclosed, and any and all Letters Patent of the United States and of all other countries which may be granted for such inventions, or any of them, including divisional, continuation, continuation-in-part, substitute, reissue, and/or reexamination applications based on the above identified Application, all such inventions and all rights in such Application and Letters Patent to be held and enjoyed by ASSIGNEE for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, and any extensions thereof, as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment and sale not been made.

Further, ASSIGNOR hereby sells, assigns, transfers, and sets over unto ASSIGNEE ASSIGNOR'S entire right, title and interest in or to the right to refer to, to access, and to control microorganism(s) or other biological material(s) related to the Application and which are deposited by ASSIGNOR or at ASSIGNOR'S direction or deposited on ASSIGNOR'S behalf by ASSIGNEE, its affiliates, employees, or employees of its affiliates. The transfer of such right,

1

title and interest includes, without limitation, ASSIGNOR'S unreserved and irrevocable consent and authorization to ASSIGNEE to refer to the deposited microorganism(s) or other biological material(s) in the Application and the right to make available to the public the deposited material in accordance with the laws, treaties, statutes, rules, regulations and the like of the United States, all other countries, and any patent granting authority or organization.

ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States and any foreign Patent Office authority to issue any such Letters Patent which may be granted on the Application to ASSIGNEE as assignee of the entire right, title and interest therein and thereto.

For ASSIGNOR and for ASSIGNOR'S legal representatives, ASSIGNOR covenants and agrees with ASSIGNEE that ASSIGNOR has not granted to any others any license to make, use or sell any of such inventions, that ASSIGNOR'S right, title and interest in such inventions has not been encumbered, that ASSIGNOR has good right and title to sell and assign the same, and that ASSIGNOR will not execute any instrument in conflict herewith.

For ASSIGNOR and for ASSIGNOR'S heirs, successors and legal representatives, ASSIGNOR further covenants and agrees with ASSIGNEE that upon request ASSIGNOR and ASSIGNOR'S heirs, successors and legal representatives will: (i) execute continuing, divisional, substitute, reexamination, and/or reissue applications, amended specifications, or rightful declarations or oaths; (ii) communicate to ASSIGNEE any facts known to ASSIGNOR or ASSIGNOR'S heirs, successors and legal representatives relating to such inventions or the history thereof; (iii) execute preliminary statements and testify in any interference proceedings or litigation; (iv) execute and deliver any application papers, assignments, or other instruments; and (v) do all other acts which, in the opinion of counsel for ASSIGNEE, may be necessary or desirable to secure the grant of Letters Patent to ASSIGNEE or its nominees, in the United States and in all other countries where ASSIGNEE may desire to have such inventions, or any of them, patented, with specifications and claims in such form as shall be approved by counsel for ASSIGNEE and to vest and confirm in ASSIGNEE or its nominees the full and complete legal and equitable title to all such Letters Patent, without further consideration than that now paid at the expense of ASSIGNEE.

In Witness Whereof I have executed this assignment on	may 13	20 16
	(Month, Day)	
Mary CHAVES	may Chaves_	
(Name of Inventor)	(Signature of Inve	entor)
COMMONWEALTH OF MASS	ACHUSETTS	
County of <u>Middlesex</u> ss.		
Day / Month	, <u>2016</u> Year	
Philip Chaves Name of Notary Public	, the undersigned N	otary Public,
personally appeared Mary Chai	VLS igner(s)	
proved to me through satisfactory evidence of identity, wh	ich was/were <u>///</u>	Drivers
Occupation of Evidence of Identity	, to be	the person(s)
whose name(s) is/are signed on the preceding or attached	document, and acknow	vledged to me
that he/she/they signed it voluntarily for its stated purpose.	<i>[]]][[</i>]	
Sign	ature of Notary Public	
Printed	i Name 10 Y ptary Pi lo	s & Chares My Public in of Massachusetts nission Expires:
My Commission E	Expires:	8/5/14

In Witness Whereof I have executed the	his assignment on		20
	•	(Month, Day)	(Year)
Matthew BIO			
(Name of Inventor)	***************************************	(Signature of Inver	ntor)
A notary public or other officer completing signed the document to which this certificat document.			
State of California County of			
On	before me,		
Notary Public, personally appeared			
	to be the person(s) the within instrum she/they executed capacity(ies), and the instrument the	e on the basis of satisfacts) whose name(s) is/are nent and acknowledged I the same in his/her/the if that by his/her/their side person(s), or the entition(s) acted, executed the	subscribed to to me that he/ eir authorized gnature(s) on y upon behalf
	•	ENALTY OF PERJUITE of California that the and correct.	
	WITNESS my ha	nd and official seal.	
Place Notary Seal Above	Signature:		

In Witness Whereof I have executed	this assignment on		20 .
		(Month, Day)	(Year)
Matthew PETERSON			
(Name of Inventor)	······································	(Signature of Inven	tor)
A notary public or other officer completing signed the document to which this certification document.			
State of California			
County of			
On	before me,		
Notary Public, personally appeared			
	to be the person(the within instrur she/they executed capacity(ies), and the instrument th	e on the basis of satisfacts) whose name(s) is/are nent and acknowledged to the same in his/her/their sign person(s), or the entity on(s) acted, executed the	subscribed to o me that he/ ir authorized gnature(s) on upon behalf
	•	PENALTY OF PERJUR te of California that the and correct.	
	WITNESS my ha	nd and official seal.	
Pisos Notary Seal Abrove	Signature:		

ASSIGNMENT

Whereas, I/we,	Mary CHAVES, 51 Webster St, Arlington, MA 02474 US
	Matthew BIO, 433 E. Micheltorena Street, Santa Barbara, CA-93101-US Kee
	Matthew PETERSON, 433 E. Micheltorena Street, Santa Barbara, CA 93101 US

(hereinaster referred to as ASSIGNOR), have made an invention which is the subject of an application for Letters Patent of the United States; and/or is the subject of a provisional application; and/or is the subject of other patent application(s) in other jurisdictions worldwide ("Application") entitled

Crystalline Forms of N-(4-((3-(2-Amino-4-Pyrimidinyl)-2-Pyridinyl)Oxy)Phenyl)-4-(4-Methyl - 2-Thienyl)-1-Phthalazinamine Salts and Uses Thereof

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Now, therefore, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns, transfers and sets over unto AMGEN INC., its successors and assigns (collectively "ASSIGNEE") ASSIGNOR'S entire right, title and interest in, to and under the Application, and any provisional application(s) from which Application is derived, and all priority rights to which the Application may be entitled, including all priority rights for other countries arising therefrom, all inventions therein disclosed, and any and all Letters Patent of the United States and of all other countries which may be granted for such inventions, or any of them, including divisional, continuation, continuation-in-part, substitute, reissue, and/or reexamination applications based on the above identified Application, all such inventions and all rights in such Application and Letters Patent to be held and enjoyed by ASSIGNEE for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, and any extensions thereof, as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment and sale not been made.

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PATENT REEL: 040139 FRAME: 0674

title and interest includes, without limitation, ASSIGNOR'S unreserved and irrevocable consent and authorization to ASSIGNEE to refer to the deposited microorganism(s) or other biological material(s) in the Application and the right to make available to the public the deposited material in accordance with the laws, treaties, statutes, rules, regulations and the like of the United States, all other countries, and any patent granting authority or organization.

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For ASSIGNOR and for ASSIGNOR'S heirs, successors and legal representatives, ASSIGNOR further covenants and agrees with ASSIGNEE that upon request ASSIGNOR and ASSIGNOR'S heirs, successors and legal representatives will: (i) execute continuing, divisional, substitute, reexamination, and/or reissue applications, amended specifications, or rightful declarations or oaths; (ii) communicate to ASSIGNEE any facts known to ASSIGNOR or ASSIGNOR'S heirs, successors and legal representatives relating to such inventions or the history thereof; (iii) execute preliminary statements and testify in any interference proceedings or litigation; (iv) execute and deliver any application papers, assignments, or other instruments; and (v) do all other acts which, in the opinion of counsel for ASSIGNEE, may be necessary or desirable to secure the grant of Letters Patent to ASSIGNEE or its nominees, in the United States and in all other countries where ASSIGNEE may desire to have such inventions, or any of them, patented, with specifications and claims in such form as shall be approved by counsel for ASSIGNEE and to vest and confirm in ASSIGNEE or its nominees the full and complete legal and equitable title to all such Letters Patent, without further consideration than that now paid at the expense of ASSIGNEE.

In Witness When	eof I have executed this	s assignment on		20
		•	(Month, Day)	(Year)
.M	ary CHAVES			
	me of Inventor)		(Signature of Inven	tor)
	COMMONWE	ALTH OF MASSA	ACHUSETTS	
County of	SS.			
				, before me,
D	3 y	Month	Year	
,	Name of Notary Pub		, the undersigned Not	tary Public,
nercanally annea	ured			
insparency appear	400	Name(s) of Sig	ner(s)	
proved to me thr	ough satisfactory evide	nce of identity, whi	ch was/were	
<u></u>	Description of Evide	ence of Identity	, to be the	ne person(s)
whose name(s) i	s/are signed on the prec	eding or attached of	locument, and acknowle	edged to me
that he/she/they:	signed it voluntarily for	its stated purpose.		
		Signa	ture of Notary Public	
		Printed	Name of Notary Public	
		My Commission E	kpires:	

In Witness Whereof I have executed the	his assignment on	MAY ZO	20/6.
	, 	(Month, Day)	(Year)
Matthew BIO			
(Name of Inventor)		(Signature of Invo	entor)
A notary public or other officer completing a signed the document to which this certificate document.			
State of California			······································
County of M100 (で)もオ			
On 144 20 2616	before me, 576	AND ENLANT	<u> </u>
Notary Public, personally appeared Mハイアイかい 8 10			
	to be the person(the within instruction she/they execute capacity(ies), and the instrument the	e on the basis of satisfa s) whose name(s) is/are ment and acknowledged d the same in his/her/th d that by his/her/their s ie person(s), or the enti- ion(s) acted, executed th	e subscribed to to me that he/ neir authorized signature(s) on ty upon behalf
Commission Expires Jun 10, 2016	laws of the Sta paragraph is true	PENALTY OF PERJU te of California that and correct. and and official seal.	
Place Notary Seal Above	Signature:		

In Witness Whereof I have executed t	his assignment on		20 .
		(Month, Day)	(Year)
Matthew PETERSON			
(Name of Inventor)		(Signature of Inven	itor)
A notary public or other officer completing signed the document to which this certificat document.			
State of California County of			
On	before me,		
Notary Public, personally appeared			
	to be the person(s the within instrum she/they executed capacity(ies), and the instrument the	on the basis of satisfact) whose name(s) is/are sent and acknowledged to the same in his/her/the that by his/her/their signs person(s), or the entity on(s) acted, executed the	subscribed to o me that he/ ir authorized gnature(s) on upon behalf
		ENALTY OF PERJUR e of California that the and correct.	
	WITNESS my hau	nd and official seal.	
Place Notary Seal Above	Signature:		

ASSIGNMENT

Whereas, I/we,	Mary CHAVES, 51 Webster St, Arlington, MA 02474 US				
	Matthew BIO, 433 E. Micheltorena Street, Santa Barbara, CA 93101 US				
	Matthew PETERSON, 433-E: Michettorena Street; Santa-Barbara; CA.93101 MLP				
	US 14 Fruit St., Hopkinton, MA 01748 18 MAYZOLG				
A					

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PATENT REEL: 040139 FRAME: 0679

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In Witness Whereo	of I have executed this assignment on			20
		•	(Month, Day)	(Year)
Mar	y CHAVES			
(Name of Inventor) (Signature of Inventor			tor)	
	COMMONWE	ALTH OF MASSA	CHUSETTS	
County of	Ss.			
On this the	day of	Month		, before me,
Day				m 4.44
	Name of Notary Pub		, the undersigned No	tary Public,
nerconally anneare	d			
possonary appear	····	Name(s) of Sign	per(s)	•••••••••••••••••••••••••••••••••••••••
proved to me throu	gh satisfactory evide	nce of identity, which	ch was/were	
	Description of Evid	ence of Identity	, to be t	he person(s)
whose name(s) is/a	re signed on the pred	ceding or attached d	ocument, and acknowle	edged to me
that he/she/they sig	ned it voluntarily for	its stated purpose.		
		Signat	ture of Notary Public	
		Printed 1	Name of Notary Public	
		My Commission Ex	pires:	

In Witness Whereof I have executed this assignment on			20	
		(Month, Day)	(Year)	
Matthew BIO				
(Name of Inventor)		(Signature of Inventor)		
A notary public or other officer completi signed the document to which this certifi document.				
State of California County of				
On	before me,		······································	
Notary Public, personally appeared				
	to be the person(s) the within instrum she/they executed capacity(ies), and the instrument the	on the basis of satisfacts) whose name(s) is/are nent and acknowledged to the same in his/her/their sign person(s), or the entity on(s) acted, executed the	subscribed to to me that he/ cir authorized gnature(s) on upon behalf	
		ENALTY OF PERJUR te of California that the and correct.		
	WITNESS my ha	nd and official seal.		
Place Notary Seal Above	Signature:			

In Witness Whereof I have executed th	ais assignment on _	<u>May 18</u> Qmon	th, Day)	20 <u>//</u> (Year)
Matthew Peterson	<u> </u>	,	Hersen	
(Name of Inventor)		(Signati	ire of Inve	ntor)
COMMONW	EALTH OF MAS	SACHUSET	rs .	
County of Hodlese ss	S.			
On this theday of	May Month	?	20/4 Year	, before me,
Kelly Johnson Name of Notary Pt	ıblic	, the unde	rsigned No	otary Public,
personally appearedMa\(\text{Ab}_{\omega}\)	Pole 1500 Name(s) of S			
proved to me through satisfactory evid	ence of identity, wi	nich was/were		
Messachusetts drivers lilenase Description of Evi	dence of Identity		to be	the person(s)
whose name(s) is/are signed on the pre-	eceding or attached	document, ar	nd acknow	edged to me
that he/she/they signed it voluntarily fo	Sign	LUM (6) nature of Nota Kely Joh d Name of No	ry Public	
	My Commission	Expires: <u>AU</u>	st 22, .	2019
	163	KELLY JOHNS Notary Public ONWEALTH OF MASSA My Commission Exp August 22, 2019	CHUSETTS wes	

PATENT REEL: 040139 FRAME: 0683

RECORDED: 10/26/2016