PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Ryan White	10/08/2009
Albert Amegadzie	10/26/2009
Marian C. Bryan	10/27/2009
Jian J. Chen	10/27/2009
Alan C. Cheng	10/09/2009
Thomas Dineen	10/12/2009
Oleg Epstein	10/08/2009
Vijay Keshav Gore	10/26/2009
Zihao Hua	10/08/2009
Jason Brooks Human	10/08/2009
Hongbing Huang	10/08/2009
Charles Kreiman	10/09/2009
Daniel La	10/09/2009
Qingyian Liu	10/27/2009
Vu Van Ma	10/27/2009
Isaac Marx	10/09/2009
Vinod F. Patel	10/09/2009
Wenyuan Qian	10/27/2009
Matthew Weiss	10/09/2009
Chester Chenguang Yuan	10/27/2009

RECEIVING PARTY DATA

Name:	Amgen Inc.
Street Address:	One Amgen Center Drive
City:	Thousand Oaks
State/Country:	CALIFORNIA
Postal Code:	91320

PROPERTY NUMBERS Total: 1

PATENT REEL: 023654 FRAME: 0024 TH \$40 00 1255847

501041281

Property Type
Application Number:

CORRESPONDENCE DATA

Total Attachments: 44

Fax Number: (805)499-8011

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 805-447-7926

Email: podgorny@amgen.com

Correspondent Name: G. Prabhakar Reddy

Address Line 1: One Amgen Center Drive

Address Line 2: Patent Operations MS 28-2-C

Address Line 4: Thousand Oaks, CALIFORNIA 91320

ATTORNEY DOCKET NUMBER:	A-1447-US-NP
NAME OF SUBMITTER:	Karen Podgorny

source=A-1447-US-NP_Assignment#page3.tif source=A-1447-US-NP_Assignment#page4.tif source=A-1447-US-NP_Assignment#page5.tif source=A-1447-US-NP_Assignment#page6.tif source=A-1447-US-NP_Assignment#page7.tif source=A-1447-US-NP_Assignment#page8.tif source=A-1447-US-NP_Assignment#page9.tif source=A-1447-US-NP_Assignment#page10.tif source=A-1447-US-NP_Assignment#page11.tif source=A-1447-US-NP_Assignment#page13.tif source=A-1447-US-NP_Assignment#page13.tif source=A-1447-US-NP_Assignment#page14.tif source=A-1447-US-NP_Assignment#page15.tif

source=A-1447-US-NP_Assignment#page1.tif source=A-1447-US-NP_Assignment#page2.tif

source=A-1447-US-NP_Assignment#page16.tif source=A-1447-US-NP_Assignment#page17.tif source=A-1447-US-NP_Assignment#page18.tif source=A-1447-US-NP_Assignment#page19.tif source=A-1447-US-NP_Assignment#page20.tif source=A-1447-US-NP_Assignment#page21.tif source=A-1447-US-NP_Assignment#page21.tif source=A-1447-US-NP_Assignment2#page21.tif source=A-1447-US-NP_Assignment2#page1.tif source=A-1447-US-NP_Assignment2#page3.tif source=A-1447-US-NP_Assignment2#page3.tif source=A-1447-US-NP_Assignment2#page4.tif source=A-1447-US-NP_Assignment2#page5.tif source=A-1447-US-NP_Assignment2#page5.tif source=A-1447-US-NP_Assignment2#page6.tif

source=A-1447-US-NP_Assignment2#page7.tif source=A-1447-US-NP_Assignment2#page8.tif source=A-1447-US-NP_Assignment2#page9.tif

source=A-1447-US-NP_Assignment2#page9.til

source=A-1447-US-NP_Assignment2#page11.tif

PATENT REEL: 023654 FRAME: 0025 source=A-1447-US-NP_Assignment2#page12.tif source=A-1447-US-NP_Assignment2#page13.tif source=A-1447-US-NP_Assignment2#page14.tif source=A-1447-US-NP_Assignment2#page15.tif source=A-1447-US-NP_Assignment2#page16.tif source=A-1447-US-NP_Assignment2#page17.tif source=A-1447-US-NP_Assignment2#page18.tif source=A-1447-US-NP_Assignment2#page19.tif source=A-1447-US-NP_Assignment2#page20.tif source=A-1447-US-NP_Assignment2#page21.tif source=A-1447-US-NP_Assignment2#page21.tif

PATENT REEL: 023654 FRAME: 0026

ASSIGNMENT

	Wherea	ıs, we, F	Ryan WHITE, 34 Willow Avenue,	Unit 1, Somerville, Massachus	setts 02144, US
			Albert AMEGADZIE, 13198 Wes	tcott Court, Moorpark, Californ	nia 93021, US
			Marian C. BRYAN, 24001 Victor		
			Jian J. CHEN, 5448 Castillo De	Rosa, Camarillo, California 930	012, US
			Alan C. CHENG, 334 Harvard S	treet, #A6, Cambridge, Massa	chusetts 02139, US
			Thomas DINEEN, 36 Waterhous		
			Oleg EPSTEIN, 44 Trowbridge S	Street, Belmont, Massachusett	s 02478, US
255 VIAM	IRABELLA,1	APT-214	Vijay Keshav GORE, 4302 Via E	neanto, Thousand Oaks, Calif	omia 91320, U S
	K3		Zihao HUA, 11 Old Boston Road	l #311, Tewksbury, Massachus	setts 01876, US
CA 91320			Jason Brooks HUMAN, 901 Bea	con Street, Apt. 5 Boston, Mas	ssachusetts 02215, US
			Hongbing HUANG, 11 Rockville	Avenue Lexington, Massachu	setts 02421, US
			Charles KREIMAN, 49 Boylston	Street, Watertown, Massachus	setts 02472, US
			Daniel LA, 124 Park Street, #3,	Brookline, Massachusetts 0244	46, US
			Qingyian LIU, 4631 Paseo Giras	ol, Camarillo, California 93012	, US
	1/42		Vu Van MA, 1739 Sunbeam Lar	e, Simi Valley, California 9306	5, US
	V		Isaac MARX, 12 Evergreen Squ	are Apt. 1, Somerville, Massac	husetts 02143, US
			Vinod F. PATEL, 3 Mossy Lane,	Acton, Massachusetts 01720,	US
			Wenyuan QIAN, 2548 Villamon	te Court, Camarillo, California	93010, US
			Matthew WEISS, 171 Marlborou		
		····	Chester Chenguang YUAN 1410	Geyser Court, Newbury Park	, California 91320, US
			ch is the subject of an applicatio		
	which is found in:	· · · · · · · · · · · · · · · · · · ·		***************************************	
	☐ (a)	Provisio	Patent Application executed on en	filed	
	☐ (b)	the US of U.S.	Patent Application executed on Provisional Application No.	filed	[which claims the benefit]
	⊠ (c)		lication Serial No.: 12558426		
		which c	laims the benefit of U.S. Provision	nal Application No. <u>61/096,082</u>	g filed 11 Sep 2008.
	(d)	US Pate	ent No.:		
	Whereas	AMGEN	INC., a Delaware corporation	having its principal place of the	ousiness at One Amgen Center

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 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, we hereby sell, assign, transfer and set over unto AMGEN INC., its successors and assigns (collectively "AMGEN") our 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, and/or continuation-in-part 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 AMGEN for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by us had this assignment and sale not been made.

Further, we hereby sell, assign, transfer, and set over unto AMGEN our 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 us or at our direction or deposited on our behalf by Amgen, its affiliates, employees or employees of its affiliates. The transfer of such right, title and interest includes, without limitation, our unreserved and irrevocable consent and authorization to AMGEN to refer to the deposited microorganisms(s) or other biological materials(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.

We authorize and request the Commissioner of Patents and Trademarks of the United States to issue any such Letters Patent which may be granted on the Application to AMGEN as assignee of the entire right, title and interest therein and thereto.

For ourselves and for our legal representatives, we covenant and agree with AMGEN that we have not granted to any others any license to make, use or sell any of such inventions, that our right, title and interest in such inventions has not been encumbered, that we have good right and title to sell and assign the same, and that we will not execute any instrument in conflict herewith.

For ourselves and for our heirs, successors and legal representatives, we further covenant and agree with AMGEN that upon request we and they will: (i) execute continuing, divisional, or reissue applications, amended specifications, or rightful declarations or oaths; (ii) communicate to AMGEN any facts known to us or them 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 AMGEN, may be necessary or desirable to secure the grant of Letters Patent to AMGEN or its nominees, in the United States and in all other countries where AMGEN 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 AMGEN and to vest and confirm in AMGEN or its nominees the full and complete legal and equitable title to all such Letters Patent, without further consideration than that now paid but at the expense of AMGEN.

County of Before me, a Notary Public for County, State of, personally app	20
State of ss: County of County, State of, personally app	20
County of Before me, a Notary Public for County, State of, personally app	20
Before me, a Notary Public for County, State of, personally app	20
	eared
who proved to me on the basis of satisfactory evidence to be the whose name is subscribed to the within instrument and acknowled me that he/she executed the same in his/her authorized capacity, by his/her signature on the instrument the person, or the ent behalf of which the person acted, executed the instrument.	edged to and that
I certify under PENALTY OF PERJURY under the laws of the California that the foregoing paragraph is true and correct.	State of
WITNESS my hand and official seal.	
Notary Public My commission expires	

In Witness Whereof I have execute Albert AMEGADZIE (Name of Inventor)	ed this assignment on the 26 day of CTO/SER 20 0 9 (Signature of Inventor)
	UNITED STATES OF AMERICA
State of Californics ss: County of Ventura ss: Before me, a Notary Public for Venture Albert	October 26 2009 entura County, State of California, personally appeared Hamegadzie
KAREN E. PODGORNY Commission # 1696909 Notary Public - California Ventura County My Comm. Expires Oct 28, 2010	who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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. Notary Public My commission expires 20 10

to Million of Million of Linear events	ad this assignment on the	O T day of	Elatal- as	20 60
In Witness Whereof I have execute	ed this assignment on the	27_day of	October	20 <u>_6</u> 9
Marian C. BRYAN (Name of Inventor)		(Signat	ture of Inventor)	
	UNITED STATES OF AMI	ERICA		
State of California,				
State of Celifornia ss:		O ctol	ber 27	2009
Before me, a Notary Public for $\frac{V}{V}$	entura County, Sta Marian C.	Bryan	<u>്പ്</u> ശ personally ap	peared
KAREN E. PODGORNY Commission # 1696909 Notary Public - California Ventura County My Comm. Expires Oct 28, 2010	who proved to me on the whose name is subscribe me that he/she executed by his/her signature on behalf of which the personal certify under PENALTY California that the foregoi WITNESS my hand and or the personal signature.	ed to the within inst the same in his/her the instrument the n acted, executed the OF PERJURY ur ng paragraph is true official seal.	rument and acknow authorized capacity person, or the erne instrument.	ledged to , and that tity upon

In Witness Whereof I have executed	d this assignment on the 2 day of A 20 09
Jian J. CHEN (Name of Inventor)	(Signature of Inventor)
ι	JNITED STATES OF AMERICA
State of California ss:	
County of Ventura ss:	October 27 2009
	entura_County, State of <u>California</u> personally appeared
·	who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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.
KAREN E. PODGORNY Commission # 1696909 Notary Public - California Ventura County My Comm. Expires Oct 28, 2010	Notary Public My commission expires October 28 20 io

In Witness Whereof I have execu	ited this assignment on the	day of	20
Alan C. CHENG (Name of Inventor)		(Signature of	Inventor)
	UNITED STATES OF AMERIC	A	
State of			
County of ss:	·		20
Before me, a Notary Public for _	County, State of	, ,	personally appeared
	who proved to me on the base whose name is subscribed to me that he/she executed the s by his/her signature on the behalf of which the person acte	the within instrument ame in his/her author instrument the perso	t and acknowledged to rized capacity, and that on, or the entity upon
	I certify under PENALTY OF California that the foregoing pa		
	WITNESS my hand and officia	ıl seal.	
		Notary Public My commission ex	

In Witness Whereof I have execu	ted this assignment on the	day of	20
Thomas DINEEN	· · · · · · · · · · · · · · · · · · ·		
(Name of Inventor)		(Signature of	Inventor)
	UNITED STATES OF AMERI	ICA	
State of			
County of ss:			20
Before me, a Notary Public for _	County, State	of,	personally appeared
	who proved to me on the bawhose name is subscribed to me that he/she executed the by his/her signature on the behalf of which the person and I certify under PENALTY Of California that the foregoing WITNESS my hand and office	to the within instrument same in his/her authorse instrument the persected, executed the instrument of PERJURY under the paragraph is true and of the instruction.	at and acknowledged to rized capacity, and that on, or the entity upon rument. The laws of the State of
	WITNESS my hand and onle	Jiai Scai.	

In Witness Whereof I have execu	ted this assignment on the	day of	20
Oleg EPSTEIN (Name of Inventor)		(Signature of Inve	ntor)
	UNITED STATES OF AMERICA		
State of Sta			20
Before me, a Notary Public for	County, State of	, perso	
	who proved to me on the basis whose name is subscribed to the me that he/she executed the san by his/her signature on the ins behalf of which the person acted.	e within instrument and ne in his/her authorized strument the person, c	d acknowledged to capacity, and that or the entity upon
	I certify under PENALTY OF Pl California that the foregoing para		
	WITNESS my hand and official s	eal.	
		Notary Public My commission expire	s20

Vijay Keshav GORE (Name of Inventor) UNITED STATES OF AMERICA	In Witness Whereof I have executed	d this assignment on the 26 th day of OCTOBER 20 0°
UNITED STATES OF AMERICA		(Signature of Inventor)
\wedge + \wedge .		UNITED STATES OF AMERICA
State of California ss: County of Ventura ss:	of Ventura ss:	October 26 2009
Before me, a Notary Public for <u>Ventura</u> County, State of <u>California</u> , personally appeared Vijay Keshav Gave	Before me, a Notary Public for $\sqrt{\rho_{\lambda}}$	untura County, State of <u>California</u> , personally appeared
whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.	KAREN E. PODGORNY Commission # 1696909 Notary Public - California Ventura County Iy Comm. Expires Oct 28, 2010	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. Notary Public My commission expires

In Witness Whereof I have exe	ecuted this assignment on theday	of20
Zihao HUA (Name of Inventor)	(Sig	gnature of Inventor)
	UNITED STATES OF AMERICA	
State of		
County of ss:		20
Before me, a Notary Public for	County, State of	, personally appeared
	who proved to me on the basis of satisfa whose name is subscribed to the within me that he/she executed the same in his/by his/her signature on the instrument behalf of which the person acted, executed it certify under PENALTY OF PERJURY	instrument and acknowledged to her authorized capacity, and that the person, or the entity uponed the instrument.
	California that the foregoing paragraph is	true and correct.
	WITNESS my hand and official seal.	true and correct.

In Witness Whereof I have execu	ted this assignment on the	day of	20
Jason Brooks HUMAN (Name of Inventor)		(Signature of Inven	tor)
	UNITED STATES OF AMERICA		
State of			
County of			20
Before me, a Notary Public for	County, State of	, perso	onally appeared
	who proved to me on the basis whose name is subscribed to the me that he/she executed the same by his/her signature on the instable behalf of which the person acted a certify under PENALTY OF P California that the foregoing paragraph.	e within instrument and me in his/her authorized strument the person, o l, executed the instrumer ERJURY under the law	acknowledged to capacity, and that r the entity upon nt.
	WITNESS my hand and official s	seal.	
		Notary Public My commission expires	s 20

In Witness Whereof I have execut	ed this assignment on thed	ay of20
Hongbing HUANG (Name of Inventor)	(Signature of Inventor)
	UNITED STATES OF AMERICA	
State of		
County of		20
Before me, a Notary Public for	County, State of	, personally appeared
	who proved to me on the basis of sat whose name is subscribed to the with me that he/she executed the same in he by his/her signature on the instrume behalf of which the person acted, executed the same in he half of which the person acted, executed the same in he half of which the person acted, executed the same in he half of which the person acted, executed the same in her half of which the person acted the same in her half of which the person acted, executed the same in her half of which the person acted, executed the same in her half of which the person acted, executed the same in her half of which the person acted, executed the same in her half of which the person acted, executed the same in her half of which the person acted, executed the same in her half of which the person acted, executed the same in her half of which the person acted, executed the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the person acted the same in her half of which the same in her ha	in instrument and acknowledged to his/her authorized capacity, and that ent the person, or the entity upon suted the instrument. RY under the laws of the State of
	WITNESS my hand and official seal.	
		Notary Public ommission expires 20

In Witness Whereof I have execu	ted this assignment on the	day of	20
Charles KREIMAN (Name of Inventor)		(Signature of	Inventor)
	UNITED STATES OF AMERIC	CA	
State of			
County of			20
Before me, a Notary Public for	County, State	of,	personally appeared
	who proved to me on the ba whose name is subscribed to me that he/she executed the by his/her signature on the behalf of which the person act I certify under PENALTY Of California that the foregoing	o the within instrumer same in his/her author instrument the persected, executed the instruction of the persected of the instruction of the persected of the instruction of the persected of the	at and acknowledged to rized capacity, and that on, or the entity upon rument.
	WITNESS my hand and office		
		Notary Publi My commission e	expires
			20

In Witness Whereof I have execu	ted this assignment on the	day of	20
Daniel LA (Name of Inventor)		(Signature of In	nventor)
,			
	UNITED STATES OF AMERIC	A	
State of ss:			
County of			20
Before me, a Notary Public for	County, State of	f, p	ersonally appeared
	who proved to me on the bas whose name is subscribed to me that he/she executed the s by his/her signature on the behalf of which the person act	the within instrument came in his/her authori instrument the person ed, executed the instru	and acknowledged to zed capacity, and that n, or the entity upon ument.
	California that the foregoing pa		
	WITNESS my hand and officia	al seal.	
		Notary Public My commission ex	

In Witness Whereof I have execute Qingyian LIU (Name of Inventor)	ed this assignment on the	()	October Significant of Inventor)	20 <u>09</u>
(Name of inventor)		(\$\text{\psi} \girles		
	UNITED STATES OF AM	ERICA		
State of California } ss:		Octo	ber 27	2009
Before me, a Notary Public for $\frac{V}{C}$	County, St.		<u>ર્થવ</u> , personally ap	peared
KAREN E. PODGORNY Commission # 1696909 Notary Public - California Ventura County My Comm. Expires Oct 28, 2010	who proved to me on the whose name is subscribe me that he/she executed by his/her signature on behalf of which the personal certify under PENALTY California that the foregody WITNESS my hand and which the personal certify under PENALTY California that the foregody WITNESS my hand and which the personal certification is the personal certification of the personal c	e basis of satisfacto ed to the within instithe same in his/her the instrument the n acted, executed the OF PERJURY uning paragraph is true	rument and acknow authorized capacity person, or the erne instrument. der the laws of the exand correct.	rledged to r, and that tity upon

In Witness Whereof I have execute Vu Van MA (Name of Inventor)	ed this assignment on the	day of OC	le
	UNITED STATES OF AMI	ERICA	
State of California			
State of California } ss: County of Ventura		October	27 20 09
Before me, a Notary Public for $\frac{\bigvee}{\bigvee}$	Centura County, Sta UVan MA	ate of <u>California</u> ,	personally appeared
KAREN E. PODGORNY Commission # 1696909 Notary Public - California Ventura County My Comm. Expires Oct 28, 2010	whose name is subscribe me that he/she executed by his/her signature on behalf of which the perso I certify under PENALTY California that the foregoi	e basis of satisfactory evied to the within instrumer the same in his/her author the instrument the person acted, executed the instruction of PERJURY under the ing paragraph is true and official seal. Notary Publication	nt and acknowledged to brized capacity, and that ion, or the entity upon trument. The laws of the State of correct.
		My commission e	expires

In Witness Whereof I have execu	ted this assignment on the	day of	20
Isaac MARX			
(Name of Inventor)		(Signature of Invent	or)
	UNITED STATES OF AMERICA		
State of			
County of			20
Before me, a Notary Public for	County, State of	, persor	nally appeared
	who proved to me on the basis of whose name is subscribed to the me that he/she executed the same by his/her signature on the instable behalf of which the person acted,	e within instrument and a ne in his/her authorized of trument the person, or	acknowledged to apacity, and that the entity upon
	I certify under PENALTY OF PI California that the foregoing para-		
	WITNESS my hand and official so	eal.	
		Notary Public My commission expires	, and the second
			20

In Witness Whereof I have execu	ted this assignment on the	day of	20
Vinod F. PATEL (Name of Inventor)		(Signature o	of Inventor)
,		· · ·	
	UNITED STATES OF AMERIC	CA	
State of ss:			
County of			20
Before me, a Notary Public for	County, State	of	, personally appeared
	who proved to me on the ba whose name is subscribed to me that he/she executed the by his/her signature on the behalf of which the person ac	o the within instrume same in his/her author instrument the pers	nt and acknowledged to orized capacity, and that son, or the entity upon
	I certify under PENALTY O California that the foregoing p		
	WITNESS my hand and offic	ial seal.	
		Notary Pub My commission	

In Witness Whereof I have execute Wenyuan QIAN (Name of Inventor)	d this assignment on the 27th day of October 2000 WR (Signature of Inventor)
	UNITED STATES OF AMERICA
State of Call Fernice ss:	October 27 2009
Before me, a Notary Public for $\frac{\sqrt{y}}{\sqrt{y}}$	entura County, State of <u>California</u> , personally appeared enuture Oian
	who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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.
KAREN E. PODGORNY Commission # 1696909 Notary Public - California Ventura County My Comm. Expires Oct 28, 2010	WITNESS my hand and official seal. (Laner E. Pooleronny Notary Public My commission expires 20 (1)

In Witness Whereof I have execut	ed this assignment on the	day of	20
Matthew WEISS (Name of Inventor)		(Signature of I	nventor)
	UNITED STATES OF AMERI	CA	
State of Sta			
Before me, a Notary Public for	County, State	of, p	ersonally appeared
	who proved to me on the ba whose name is subscribed t me that he/she executed the by his/her signature on the behalf of which the person as	o the within instrument same in his/her author instrument the perso	and acknowledged to ized capacity, and that n, or the entity upon
	I certify under PENALTY O California that the foregoing		
	WITNESS my hand and office	ial seal.	
		Notary Public My commission ex	

In Witness Whereof I have execute	ed this assignment on the 27 day of 20 9
Chester Chenguang YUAN (Name of Inventor)	(Signature of Inventor)
	UNITED STATES OF AMERICA
State of California ss:	October 27 2000
Before me, a Notary Public for $\sqrt{\ \ \ \ }$	entura County, State of <u>California</u> , personally appeared Nester Yvan
KAREN E. PODGORNY	who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
Commission # 1696909 Notary Public - California Ventura County My Comm. Expires Oct 28, 2010	I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
My Comm. Expires	WITNESS my hand and official seal.
	Notary Public
	Notary Public My commission expires October 29 20 10
,	

ASSIGNMENT

Wherea	s, we, Ryan WHITE, 34 Willow Avenue, Unit 1, Somerville, Massachusetts 02144, US
	Albert AMEGADZIE, 13198 Westcott Court, Moorpark, California 93021, US
	Marian C. BRYAN, 24001 Victory Boulevard, West Hills, California 91307, US
	Jian J. CHEN, 5448 Castillo De Rosa, Camarillo, California 93012, US
	Alan C. CHENG, 334 Harvard Street, #A6, Cambridge, Massachusetts 02139, US
	Thomas DINEEN, 36 Waterhouse Street, Somerville, Massachusetts 02144, US
	Oleg EPSTEIN, 44 Trowbridge Street, Belmont, Massachusetts 02478, US
	Vijay Keshav GORE, 4302 Via Encanto, Thousand Oaks, California 91320, US
	Zihao HUA, 11 Old Boston Road #311, Tewksbury, Massachusetts 01876, US
	Jason Brooks HUMAN, 901 Beacon Street, Apt. 5 Boston, Massachusetts 02215, US
	Hongbing HUANG, 11 Rockville Avenue Lexington, Massachusetts 02421, US
	Charles KREIMAN, 49 Boylston Street, Watertown, Massachusetts 02472, US
	Daniel LA, 124 Park Street, #3, Brookline, Massachusetts 02446, US
	Qingyian LIU, 4631 Paseo Girasol, Camarillo, California 93012, US
	Vu Van MA, 1739 Sunbeam Lane, Simi Valley, California 93065, US
	Isaac MARX, 12 Evergreen Square Apt. 1, Somerville, Massachusetts 02143, US
	Vinod F. PATEL, 3 Mossy Lane, Acton, Massachusetts 01720, US
	Wenyuan QIAN, 2548 Villamonte Court, Camarillo, California 93010, US
	Matthew WEISS, 171 Marlborough Street #1, Boston, Massachusetts 02116, US
	Chester Chenguang YUAN 1416 Geyser Court, Newbury Park, California 91320, US
	ention which is the subject of an application for Letters Patent of the United States ("Application") entitled ricyclic Ring Compounds as Beta-Secretase Modulators and Methods of Use
which is found in:	the US Patent Application executed on even date herewith; [which claims the benefit of U.S. Provisional Application Nofiled]
П (b)	
☐ (b)	the US Patent Application executed on [which claims the benefit of U.S. Provisional Application No filed]
⊠ (c)	US Application Serial No.: 12558426 filed on September 11, 2009
	which claims the benefit of U.S. Provisional Application No. 61/096,082 filed 11 Sep 2008.
☐ (d)	US Patent No.:
(* /	
Whereas	AMGEN INC., a Delaware corporation having its principal place of business at One Amgen Center

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 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, we hereby sell, assign, transfer and set over unto AMGEN INC., its successors and assigns (collectively "AMGEN") our 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, and/or continuation-in-part applications based on the above identified Application, all such inventions and all

PATENT REEL: 023654 FRAME: 0049

rights in such Application and Letters Patent to be held and enjoyed by AMGEN for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by us had this assignment and sale not been made.

Further, we hereby sell, assign, transfer, and set over unto AMGEN our 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 us or at our direction or deposited on our behalf by Amgen, its affiliates, employees or employees of its affiliates. The transfer of such right, title and interest includes, without limitation, our unreserved and irrevocable consent and authorization to AMGEN to refer to the deposited microorganisms(s) or other biological materials(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.

We authorize and request the Commissioner of Patents and Trademarks of the United States to issue any such Letters Patent which may be granted on the Application to AMGEN as assignee of the entire right, title and interest therein and thereto.

For ourselves and for our legal representatives, we covenant and agree with AMGEN that we have not granted to any others any license to make, use or sell any of such inventions, that our right, title and interest in such inventions has not been encumbered, that we have good right and title to sell and assign the same, and that we will not execute any instrument in conflict herewith.

For ourselves and for our heirs, successors and legal representatives, we further covenant and agree with AMGEN that upon request we and they will: (i) execute continuing, divisional, or reissue applications, amended specifications, or rightful declarations or oaths; (ii) communicate to AMGEN any facts known to us or them 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 AMGEN, may be necessary or desirable to secure the grant of Letters Patent to AMGEN or its nominees, in the United States and in all other countries where AMGEN 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 AMGEN and to vest and confirm in AMGEN or its nominees the full and complete legal and equitable title to all such Letters Patent, without further consideration than that now paid but at the expense of AMGEN.

In Witness Whereof I have execute	ed this assignment on the	8th day of		20_09
Ryan WHITE (Name of Inventor)		The	ature of Inventor)	
	UNITED STATES OF AME	ERICA		
State of Maskethouth ss:		Ø4.	ℓ_1	₂₀ 09
State of Sta	Willens County, Sta	ate of MASAU	personally a	appeared
·	who proved to me on the whose name is subscribe me that he/she executed by his/her signature on behalf of which the person	ed to the within ins the same in his/he the instrument th	strument and acknow r authorized capaci e person, or the	owledged to ity, and that
	I certify under PENALTY California that the foregon WITNESS my hand and o	ng paragraph is tru		ne State of
JULIE 8. LANGUIRAND Notary Public Massachusetts Commission Expires Dec 24, 2015			y Public ssion expires (2 24	2015
a magamata				

3

In Witness Whereof I have execu	ted this assignment on the	day of	20
Albert AMEGADZIE (Name of Inventor)		(Signature o	of Inventor)
	UNITED STATES OF AMER	ICA	
State of Sta			
,	_		20
Before me, a Notary Public for	County, State	of	, personally appeared
	who proved to me on the be whose name is subscribed me that he/she executed the by his/her signature on the behalf of which the person a	to the within instrume e same in his/her auth e instrument the per	ent and acknowledged to corized capacity, and that son, or the entity upon
	I certify under PENALTY C		
	WITNESS my hand and office	cial seal.	
,		Notary Pub My commission	

	In Witness Whered	of I have execu	uted this assignment on the	day of	20
	_Marian C	. BRYAN			
	(Name of	Inventor)		(Signatur	e of Inventor)
			UNITED STATES OF AMER	RICA	
State of	١				
County o	f J	SS:			20
	Before me, a Notar	y Public for _	County, State	e of	, personally appeared
			who proved to me on the be whose name is subscribed me that he/she executed the by his/her signature on the behalf of which the person a	to the within instrur e same in his/her au ne instrument the p	ment and acknowledged to uthorized capacity, and that person, or the entity upon
			I certify under PENALTY (California that the foregoing		
			WITNESS my hand and offi	cial seal.	
				Notary P My commissio	

In Witness Whereof I have execu	ted this assignment on the	day of	20
Jian J. CHEN (Name of Inventor)		(Signature of	f Inventor)
	UNITED STATES OF AMER	ICA	
State of ss:			
County of	·		20
Before me, a Notary Public for	County, State	of,	personally appeared
	who proved to me on the be whose name is subscribed me that he/she executed the by his/her signature on the behalf of which the person a	to the within instrumer e same in his/her autho e instrument the pers	nt and acknowledged to prized capacity, and that son, or the entity upon
	I certify under PENALTY C California that the foregoing		
	WITNESS my hand and office	cial seal.	
		Notary Publ My commission e	

In Witness Whereof I have execute	ed this assignment on the	9th day of	October	_20 <u>09</u>
Alan C. CHENG (Name of Inventor)		(Signate	uré of Inventor)	
	UNITED STATES OF AME	ERICA		
State of Mrs SAduratts				
State of Mrs SAdurats County of Middlesex ss:	. À 1A	Od	. 09	20 09
Before me, a Notary Public for $\sqrt{}$	County, Sta	ate of <u>WMSSAC</u>	huz personally ap	peared
· V	who proved to me on the whose name is subscribe me that he/she executed by his/her signature on behalf of which the persor	ed to the within instrate the same in his/her at the instrument the	ument and acknow authorized capacity person, or the er	ledged to , and that
	I certify under PENALTY California that the foregoin			State of
	WITNESS my hand and o	official seal. Notary My commiss	uivile sion expires	
			12/24/	2009
		Com	JULIE 8. LANGUIRAND Notary Public Massachusetts mission Expires Dec 24.	•

In Witness Whereof I have execu	uted this assignment on the	day of	October	20 0 9
Thomas DINEEN (Name of Inventor)		(Signatu	re of Inventor)	
	UNITED STATES OF AM	ERICA		
State of Massa University County of Middle Sex ss:				
County of Middle Sex ss:		Od.	12,	20 δ 9
Before me, a Notary Public for _C	Middle SOL County, St	ate of MASSACH	vattoersonally ap	peared
	who proved to me on the whose name is subscrib me that he/she executed by his/her signature on behalf of which the personal certify under PENALT California that the forego WITNESS my hand and	ed to the within instruction the same in his/her at the instrument the on acted, executed the YOF PERJURY uncling paragraph is true	ument and acknown authorized capacity person, or the ere instrument. Her the laws of the and correct. Public	rledged to r, and that ntity upon
			LIE 8. LANGURAND Notary Public Messachusetts asion Expires Dec 24, 2	015

In Witness Whereof I have execute	ed this assignment on the
Oleg EPSTEIN (Name of Inventor)	(Signature of Inventor)
	UNITED STATES OF AMERICA
State of Myssichusets Sounty of Middle ser	Oct. 8th, 2009 Miller County, State of Masseuse Appeared
Before me, a Notary Public for $$	William County, State of Whashing personally appeared
	who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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 efficial seal Notary Public My commission expires
	JULIE B. LANGUIRAND Notary-Public Massachusetts Commission Expires Dec 24, 2015

In Witness Whereof I have execu	d this assignment on theday of20
Vijay Keshav GORE	
(Name of Inventor)	(Signature of Inventor)
	UNITED STATES OF AMERICA
State of	
County of ss:	20
Before me, a Notary Public for	County, State of, personally appeared
	who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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.
	Notary Public My commission expires

In Witness Whereof I have execu	uted this assignment on the	09
Zihao HUA (Name of Inventor)	(Signature of Inventor)	
4.10	UNITED STATES OF AMERICA	
State of WH County of Millesin ss:	Oct. 8, 20	09
Before me, a Notary Public for Z	MiddleSest County, State of Mrs. Stelhout, personally appeared	d
	who proved to me on the basis of satisfactory evidence to be the per whose name is subscribed to the within instrument and acknowledge me that he/she executed the same in his/her authorized capacity, and by his/her signature on the instrument the person, or the entity u behalf of which the person acted, executed the instrument.	d to that
	I certify under PENALTY OF PERJURY under the laws of the State California that the foregoing paragraph is true and correct.)	e of
	WITNESS my hand and official seal. Notary Public My commission expires 12 24 201	<u> </u>
JULIE B. LANGUIRAND Notary Public Massachusetts		

In Witness Whereof I have execu	ated this assignment on the
Jason Brooks HUMAN (Name of Inventor)	(Signature of Inventor)
State of MASSAchusetts County of Middle Sud ss:	UNITED STATES OF AMERICA
	What Odber, 2009 What personally appeared
	who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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
	Notary Public My commission expires 12/24/20 34-15
JULIE B. LANGUIRAND Notary Public	



Massachusetts Commission Expires Dec 24, 2015

PATENT

In Witness Whereof I have execute Hongbing HUANG (Name of Inventor)	ed this assignment on the day of the 20 09 Signature of Inventor)
, ,	
State of Massachusetts County of Wildleson ss:	UNITED STATES OF AMERICA
1	<u> </u>
Before me, a Notary Public for Ung hung	County, State of Wyskhust, personally appeared
	who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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 officier seal.
	Notary Public My commission expires 20 15
JULIE B. LANGUIRAND Notary Public Massachusetts Commission Expires Dec 24, 2015	

In Witness Whereof I have executed this assign	ment on the 9 day of October 20 09
Charles KREIMAN (Name of Inventor)	(Signature of Inventor)
	TES OF AMERICA
State of Marchents State of Marchents SS: County of Marchents	Det. 9, 20 07
Before me, a Notary Public for Madlessa Mallo Kunnan	County, State of Washers, Fersonally appeared
who proved whose name that he/s by his/her s	to me on the basis of satisfactory evidence to be the person e is subscribed to the within instrument and acknowledged to the executed the same in his/her authorized capacity, and that signature on the instrument the person, or the entity upon ich the person acted, executed the instrument.
	er PENALTY OF PERJURY under the laws of the State of at the foregoing paragraph is true and correct.
WITNESS m	Metary Public My commission expires 20 45
	JULIE B. LANGUIRAND Notary Public Massachusetts Commission Expires Dec 24, 2015

In Witness Whereof I have execute	d this assignment on the _	9 day of	Oct.	20 <u>09</u>
Daniel LA (Name of Inventor)		(Signatur	re of Inventor)	
	UNITED STATES OF AMERIC	CA		
State of Msigchasetts County of Widdlesex ss:	<u> </u>	Oct.	۹,	20 6 9
Before me, a Notary Public for	County, State of	of Mysselv	personally ap	peared
	who proved to me on the ba whose name is subscribed to me that he/she executed the by his/her signature on the behalf of which the person ac	o the within instru same in his/her a instrument the p	ment and acknow uthorized capacity person, or the er	rledged to r, and that
	I certify under PENALTY OF California that the foregoing p	F PERJURY under paragraph is true a	er the laws of the	State of
	WITNESS my hand and offici	ial seal.		
		(Notary F My commission		2015
				4
	· ·	Com	JULIE B. LANGUIRAN Notary Public Massachusetts nission Expires Dec 24	•

in witness whereof I have execu	ted this assignment on thed	ay of20
Qingyian LIU		
(Name of Inventor)	. (:	Signature of Inventor)
	UNITED STATES OF AMERICA	
State of Sta		
•		20
Before me, a Notary Public for	County, State of	, personally appeared
	who proved to me on the basis of satishose name is subscribed to the within me that he/she executed the same in high by his/her signature on the instrumed behalf of which the person acted, executed the same in high particles of the person acted, executed the same in high particles of the same in high part	n instrument and acknowledged to is/her authorized capacity, and that he person, or the entity upon uted the instrument. RY under the laws of the State of
	WITNESS my hand and official seal.	
	• • •	

In Witness Whereof I have execu	ted this assignment on the	day of	20
Vu Van MA (Name of Inventor)		(Signature of Inver	ntor)
	UNITED STATES OF AMERICA		
State of			
County of			20
Before me, a Notary Public for	County, State of	, perso	onally appeared
·	who proved to me on the basis of whose name is subscribed to the me that he/she executed the same by his/her signature on the instable behalf of which the person acted,	e within instrument and ne in his/her authorized trument the person, o	acknowledged to capacity, and that r the entity upon
	I certify under PENALTY OF PE California that the foregoing parag		
	WITNESS my hand and official se	eal.	
		Notary Public My commission expires	S 20

In Witness Whereof I have execu	uted this assignment on the 9th day of October 2009
Janes MADV	
Isaac MARX (Name of Inventor)	(Signature of Inventor)
	UNITED STATES OF AMERICA
State of JUASSychusetts	
State of Middless ss:	Oct. 9, 2009
Before me, a Notary Public for \angle	Widdleses County, State of Whish chuspersonally appeared
	who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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.
	Notary Public My commission expires 12 20 15
	JULIE B. LANGUIRAND Notary Public Massachusetts Commission Expires Dec 24, 2015

In Witness Whereof I have execut Vinod F. PATEL (Name of Inventor)	ted this assignment on the day of October 2009 (Signature of Inventor)
State of Massachusets County of Middlesco	UNITED STATES OF AMERICA
Before me, a Netary Public for	Middle Sex County, State of Massichust, Bersonally appeared
	who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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. Notang Public My commission expires
	12 24 20 5



In Witness Whereof I have execu	ited this assignment on the	day of	20
Wenyuan QIAN (Name of Inventor)		(Signatu	re of Inventor)
	UNITED STATES OF AM	ERICA	
State of			
County of		•	
oddiny of			20
Before me, a Notary Public for	County, Sta	ate of	, personally appeared
	whose name is subscribe me that he/she executed	ed to the within instru the same in his/her a the instrument the	y evidence to be the person ament and acknowledged to authorized capacity, and that person, or the entity upon a instrument.
	I certify under PENALTY California that the foregoi		er the laws of the State of and correct.
	WITNESS my hand and o	official seal.	
·		Notary I My commissi	
		·	20

In Witness Whereof I have executed this assignment	t on the OB day of DCTDRETK 20 b9
Matthew WEISS (Name of Inventor)	(Signature of Inventor)
UNITED STATES	S OF AMERICA
State of MASIAMUSTATION SS: County of MASIAMUSTATION SS:	<u>4.09</u> 20.09
Before me, a Notary Public for Madesuse Co	ounty, State of WASAUALL, personally appeared
whose name is a me that he/she e by his/her signa behalf of which the	ne on the basis of satisfactory evidence to be the person subscribed to the within instrument and acknowledged to executed the same in his/her authorized capacity, and that ature on the instrument the person, or the entity upon he person acted, executed the instrument. PENALTY OF PERJURY under the laws of the State of
	e foregoing paragraph is true and correct.
WITNESS my ha	Notary Public My commission expires 12 24 25
Comn	JULIE B. LANGUIRAND Notary Public Massachusetts Massachusetts Mission Expires Dec 24, 2015

In Witness Whereof I have execut	ed this assignment on the	day of20
Chester Chenguang YUAN		(Cignature of Inventor)
(Name of Inventor)		(Signature of Inventor)
	UNITED STATES OF AMERICA	
State of		
County of		20
Before me, a Notary Public for	County, State of	, personally appeared
	whose name is subscribed to the warmen that he/she executed the same by his/her signature on the instrubehalf of which the person acted, expensively under PENALTY OF PERSON ACTION OF PERSON ACT	RJURY under the laws of the State of
	California that the foregoing paragra WITNESS my hand and official sea	,
	M	Notary Public ly commission expires 20

22

PATENT REEL: 023654 FRAME: 0070

RECORDED: 12/15/2009