504041699 10/07/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4088360

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
EVA FAN GEFROH	07/24/2014
RANDOLPH W. SCHWEICKART	07/24/2014
KRISTA MARIE PETTY	07/24/2014
GREGORY THOMAS FRANK	07/25/2014
CHRISTINE SALSTROM TERPSMA	08/25/2014
ARTHUR C. HEWIG III	07/24/2014
JOSEPH EDWARD SCHULTZ	08/11/2014

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

Property Type	Number
Application Number:	15302762

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: docket@marshallip.com

Correspondent Name: MARSHALL, GERSTEIN & BORUN LLP (AMGEN)

Address Line 1: 233 SOUTH WACKER DRIVE

Address Line 2: 6300 WILLIS TOWER

Address Line 4: CHICAGO, ILLINOIS 60606-6357

ATTORNEY DOCKET NUMBER:	32263/47766A
NAME OF SUBMITTER:	MICHAEL P. FURMANEK
SIGNATURE:	/Michael P. Furmanek/
DATE SIGNED:	10/07/2016

504041699 PATENT REEL: 040284 FRAME: 0504

Total Attachments: 36
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PATENT REEL: 040284 FRAME: 0505

ASSIGNMENT

Whereas, I/we,	Eva Fan Gefroh residing at 8122 126th Place SE, Newcastle, Washington 98056 United States of America
	Randolph Whitfield Schweickart residing at 13258 NE 145th Place,
	Woodinville, Washington 98072 United States of America
	Krista Marie Petty residing at 1710 W. Hillcrest Drive, Apt. #7, Newbury Park,
	California 91320 United States of America
	Gregory Thomas Frank residing at 1758 Red Robin Place, Thousand Oaks,
·	California 91320 United States of America
	Christine Salstrom Terpsma residing at 18242 58th Avenue NE, Kenmore,
	Washington 98028 United States of America
	Arthur Carl Hewig III residing at 951 Remington Place, Newbury Park,
	California 91320 United States of America
	Joseph Edward Shultz residing at Baslerstrasse 5A, Binningen – 4102,
	Switzerland

(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

PROCESS CONTROL SYSTEMS AND METHODS FOR USE WITH FILTERS AND FILTRATION PROCESSES

which is found in:

US Provisional Application No. 61/992,595 filed May 13, 2014.

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

1

PATENT REEL: 040284 FRAME: 0506 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, 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 as	ssignment on	24 July (Month, Day)	2014. (Year)
Eva Fan Gefroh (Name of Inventor)	·······	(Signature of Inven	tor)
UNITED ST	TATES OF AM	ERICA	
State of Washington County of King			
I certify that I know or have satisfactory ev	vidence that	Eva Fan Gefroh Name of Signer	
	is the person who appeared before me, and said person acknowledged that he/she signed this instrument and acknowledged it to be his/her free and voluntary act for the uses and purposes mentioned in the instrument.		signed this to be his/her
	Dated:	JUST 24 2014	
Notary Public State of Washington JAE 8 CHO My Appointment Expires Mar 1, 2015	My appoint	Month/Day/Year Signature of Notarizing Office 37407 PUBLIC Title tment expires:	er
Place Notary Seal and/or Stamp Above	·	<u>へかい) 2015</u> th/Day/Year of Appointment Exp	oiration

In Witness Whereof I have executed this as Randolph Whitfield Schweickart (Name of Inventor)	signment on 7 24 2014. (Month, Day) (Year) (Signature of Inventor)
UNITED ST	ATES OF AMERICA
State of Washington County of King	
I certify that I know or have satisfactory ev	idence that Randolph Whitfield Schweickart Name of Signer
	is the person who appeared before me, and said person acknowledged that he/she signed this instrument and acknowledged it to be his/her free and voluntary act for the uses and purposes mentioned in the instrument.
	Dated: フリーソー ンサー ショッド Month/Day/Year
Notary Public State of Washington JAE B CHO My Appointment Expires Mar 1, 2015	Signature of Notarizing Officer NOTARY PURLIC Title
المناسبة	My appointment expires:
Place Notary Seal and/or Stamp Above	Month/Day/Year of Appointment Expiration

In Witness Whereof I have executed	this assignment on		2014.
		(Month, Day)	(Year)
Krista Marie Petty			
(Name of Inventor)		(Signature of Inver	ntor)
UNIT	ED STATES OF AM	ERICA	
State of California			
County of Ventura			
On	before me,		
Notary Public, personally appeared			
	Krista Marie Petty		
	to be the person(s the within instrum she/they executed capacity(ies), and the instrument the	on the basis of satisface) whose name(s) is/are tent and acknowledged the same in his/her/their site person(s), or the entity on(s) acted, executed the	subscribed to to me that he/ eir authorized gnature(s) on upon behalf
		ENALTY OF PERJUF e of California that t and correct.	
	WITNESS my har	nd and official seal.	
Place Notary Scal Above	Signature:		•

In Witness Whereof I have executed	this assignment on		2014.
		(Month, Day)	(Year)
Gregory Thomas Frank			
(Name of Inventor)		(Signature of Inven	itor)
UNIT	ED STATES OF AM	ERICA.	
State of California			
County of Ventura			
On	before me,		
Notary Public, personally appeared			
	Gregory Thomas Frank	<u> </u>	
	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 a ent and acknowledged the same in his/her/the that by his/her/their single person(s), or the entity n(s) acted, executed the	subscribed to to me that he/ cir authorized gnature(s) on upon behalf
	**	ENALTY OF PERJUR of California that the nd correct.	
	WITNESS my han	d and official seal.	
Place Notary Seal Above	Signature:		

In Witness Whereof I have executed the	
	(Month, Day) (Year)
Christine Salstrom Terpsma	
(Name of Inventor)	(Signature of Inventor)
UNITE	D STATES OF AMERICA
State of Washington	
County of <u>King</u>	S.
I certify that I know or have satisfactor	ory evidence that Christine Salstrom Terpsma Name of Signer
	is the person who appeared before me, and sai person acknowledged that he/she signed thi
	instrument and acknowledged it to be his/he
	free and voluntary act for the uses and purpose
	mentioned in the instrument.
	Dated:
	Dated:Month/Day/Year
	Signature of Notarizing Officer
	Title
	My appointment expires:
Place Notary Seal and/or Stamp Above	Month/Day/Year of Appointment Expiration

In Witness Whereof I have exec	uted this assignment on		2014.
		(Month, Day)	(Year)
Arthur Carl Hewig I	II		
(Name of Inventor)		(Signature of Inven	tor)
U	NITED STATES OF AMI	ERICA	
State of California			
County of Ventura	•		
On	before me,		
Notary Public, personally appear	red		
	Arthur Carl Hewig III	·····	
	to be the person(s) the within instrument 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 sig person(s), or the entity n(s) acted, executed the	subscribed to o me that he/ ir authorized gnature(s) on upon behalf
		ENALTY OF PERJUR of California that the nd correct.	
	WITNESS my han	d and official seal.	
Place Notary Seal Above	Signature:		

In Witness Whereof I have executed this assignment on		2014.
	(Day, Month)	(Year)
Joseph Edward Shultz		
(Name of Inventor)	(Signature of Inve	
Place of Execution:		
Witness 1:	Witness 2:	
Signature:	Signature:	
Date:	Date:	***************************************
Name:	Name:	
Address:	Address:	
City:	City:	
Country:	Country:	

ASSIGNMENT

	Eva Fan Gefroh residing at 8122 126th Place SE, Newcastle, Washington 98056
Whereas, I/we,	United States of America
	Randolph Whitfield Schweickart residing at 13258 NE 145th Place,
	Woodinville, Washington 98072 United States of America
	Krista Marie Petty residing at 1710 W. Hillcrest Drive, Apt. #7, Newbury Park,
	California 91320 United States of America
	Gregory Thomas Frank residing at 1758 Red Robin Place, Thousand Oaks,
	California 91320 United States of America
:	Christine Salstrom Terpsma residing at 18242 58th Avenue NE, Kenmore,
	Washington 98028 United States of America
	Arthur Carl Hewig III residing at 951 Remington Place, Newbury Park,
	California 91320 United States of America
	Joseph Edward Shultz residing at Baslerstrasse 5A, Binningen – 4102,
***************************************	Switzerland

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1

PATENT REEL: 040284 FRAME: 0515 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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In Witness Whereof I have executed to	his assignment on(Month, Day)	2014.
	(Month, Day)	(Year)
Eva Fan Gefroh		
(Name of Inventor)	(Signature of In	ventor)
UNITE	D STATES OF AMERICA	
State of Washington		
County of King ss	•	
I certify that I know or have satisfacte	ory evidence that Eva Fan Gefro	
	is the person who appeared bef	
	person acknowledged that he	
	instrument and acknowledged	it to be his/he
	free and voluntary act for the u	ses and purpose
	mentioned in the instrument.	
	Dated	
	Dated:	
	Signature of Notarizing (Officer
	Title	
	My appointment expires:	
Bace Natary Seal and/or Stamn Above	Month/Day/Veer of Agnointmen	A Francisco

In Witness Whereof I have executed this	assignment on(Month, Da	2014.
	(Month, Da	y) (Year)
Randolph Whitfield Schweickart		
(Name of Inventor)	(Signature o	of Inventor)
UNITED S	TATES OF AMERICA	
State of Washington		
County of <u>King</u>		
I certify that I know or have satisfactory	evidence that Randolph Whitfield Name of S	
	is the person who appeared person acknowledged that	
	instrument and acknowled	•
	free and voluntary act for the mentioned in the instrument	
	Dated:Month/Day/	
	Month/Day/	Year
	Signature of Notari	zing Officer
	Title	
	My appointment expires:	
Blaco Notary Saal and a Stavan Abous	Month/Day/Voor of Armain	**************************************

In Witness Whereof I have executed the	his assignment on	07/24 (Month, Day)	2014. (Year)
Krista Marie Petty (Name of Inventor)		(Signature of Inve	entor)
UNITE	D STATES OF AMI	ERICA	
State of California County of Ventura On	before me, Det	ne kyon mer	rill ,
	Krista Marie Petty		
DEBRA LYNN MERRILL Commission # 2047631 Notary Public - Californis Ventura County My Comm. Expires Nov 1, 2017	to be the person(s) the within instrume Shothey executed capacity(ies), and the instrument the of which the person I certify under PI	on the basis of satisfact whose name(s) (source the same in his (he)/the that by his he)/their series of acted, executed the ENALTY OF PERJURY of California that and correct.	subscribed to to me that he/seir authorized ignature(s) on ty upon behalf e instrument.
	WITNESS my han	d and official seal.	
Place Notary Scal Above	Signature:	eles Ly N	levil _

フ/ユS (Month, Day)	2014. (Year)
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Signature of Inventor)	
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yon Merci	<u> </u>
e basis of satisfactory se name(s) (sare subside acknowledged to make in (nis her/their are py (nis her/their signation(s), or the entity uponted, executed the instance.	cribed to e that he uthorized ure(s) on on behalf rument.
S ()	se name(s) (s/are subsed acknowledged to mount in (nis/her/their ausy (sis/her/their signation (s), or the entity upo

Place Notary Seal Above

Signature:

paragraph is true and correct.

WITNESS my hand and official seal.

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laws of the State of California that the foregoing

In Witness Whereof I have executed this assignn	ent on2014.
	(Month, Day) (Year)
Christine Salstrom Terpsma	
(Name of Inventor)	(Signature of Inventor)
UNITED STATE	S OF AMERICA
State of Washington	
County of King	
I certify that I know or have satisfactory evidence	e that Christine Salstrom Terpsma Name of Signer
្ត វ	the person who appeared before me, and said
	erson acknowledged that he/she signed this
ň	strument and acknowledged it to be his/he
f	ee and voluntary act for the uses and purpose
n	entioned in the instrument.
r	ated:
•	Month/Day/Year
	Signature of Notarizing Officer
•	Title
<i>y</i>	ly appointment expires:
Place Notary Seal and/or Stamp Above	Month/Day/Year of Appointment Expiration

In Witness Whereof I have executed the	his assignment on $\frac{\sqrt{24}^{*}}{(\text{Month, Day})}$ 2014.
Arthur Carl Hewig III (Name of Inventor)	(Signature of Inventor)
UNITE	D STATES OF AMERICA
State of California County of Ventura	
Notary Public, personally appeared	before me, Debra Lyn Mecril, Arthur Carl Hewig III
DEBRA LYNN MERRILL Commission # 2047631 Notary Public - California # Ventura County My Comm. Expires Nov 1, 2017	who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) are subscribed to the within instrument and acknowledged to me that he she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) 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.
Place Notary Scal Above	Signature: Leba Ly Meuill

In Witness Whereof I have executed this assignment on		2014.
	(Day, N	Month) (Year)
Joseph Edward Shultz		
(Name of Inventor)		of Inventor)
Place of Execution:		
Witness 1:	Witness 2:	
Signature:	Signature:	
Date:	Date:	
Name:	Name:	
Address:	Address:	
City:	City:	
Country:	Country:	

ASSIGNMENT

Whereas, I/we,	Eva Fan Gefroh residing at 8122 126th Place SE, Newcastle, Washington 98056 United States of America
	Randolph Whitfield Schweickart residing at 13258 NE 145th Place,
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	Krista Marie Petty residing at 1710 W. Hillcrest Drive, Apt. #7, Newbury Park,
	California 91320 United States of America
	Gregory Thomas Frank residing at 1758 Red Robin Place, Thousand Oaks,
	California 91320 United States of America
	Christine Salstrom Terpsma residing at 18242 58th Avenue NE, Kenmore,
	Washington 98028 United States of America
	Arthur Carl Hewig III residing at 951 Remington Place, Newbury Park,
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	Switzerland

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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 a	ssignment on		2014.
		(Month, Day)	(Year)
Eva Fan Gefroh			
(Name of Inventor)	······································	(Signature of Inven	tor)
UNITED S	TATES OF AM	ERICA	
State of Washington			
County of King			
I certify that I know or have satisfactory e	evidence that	Eva Fan Gefroh Name of Signer	
	***	n who appeared before nowledged that he/she	
	-	and acknowledged it	
		luntary act for the uses in the instrument.	and purpose
	menuoneu	n me insument.	
	Dated:	Month/Day/Year	
	***************************************	Signature of Noterizing Office	er
		Title	
	My appoint	ment expires:	
Piace Notary Seal and/or Stamp Above	Mon	h/Day/Year of Appointment Ex	

In Witness Whereof I have execute		2014.
	(Month, I	(Year)
Randolph Whitfield Schwei	kart	
(Name of Inventor)	(Signature	of Inventor)
UNI	TED STATES OF AMERICA	
State of Washington		
County of King	SS.	
I certify that I know or have satisf	ctory evidence that Randolph Whitfie	
	is the person who appeare person acknowledged the	·
	instrument and acknowle	dged it to be his/he
•	free and voluntary act for mentioned in the instrumen	
	Dated:	
	Month/Da	y/Year
	Signature of Note	urizing Officer
	Title	
	My appointment expires:	
Place Notary Seal and/or Stamp Above	Month/Dav/Year of Anno	intment Expiration

In Witness Whereof I have execute	d this assignment on		2014.
		(Month, Day)	(Year)
Krista Marie Petty			
(Name of Inventor)		(Signature of Inver	ntor)
UNI	TED STATES OF AM	ERICA	
State of California			
County of Ventura			
On	before me,		
Notary Public, personally appeared			
	Krista Marie Petty		
	to be the person(s the within instrum she/they executed capacity(ies), and the instrument the	c on the basis of satisfaces) whose name(s) is/are nent and acknowledged the same in his/her/their sit that by his/her/their site person(s), or the entity on(s) acted, executed the	subscribed to to me that he/ eir authorized gnature(s) on y upon behalf
		ENALTY OF PERJUE te of California that that the correct.	
	WITNESS my ha	nd and official seal.	•
Place Notary Scal Above	Signature:		

In Witness Whereof I have execu	ted this assignment on		2014.
		(Month, Day)	(Year)
Gregory Thomas Fran	k		
(Name of Inventor)		(Signature of Inver	itor)
UN	ITED STATES OF AMI	ERICA	
State of California			
County of <u>Ventura</u>			
On	before me,		***************************************
Notary Public, personally appeare	ed		
	Gregory Thomas Frank		
	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 ent and acknowledged the same in his/her/their si person(s), or the entity n(s) acted, executed the	subscribed to to me that he/ cir authorized gnature(s) on upon behalf
		ENALTY OF PERJUR of California that to and correct.	
	WITNESS my han	d and official seal.	
Place Notary Seal Above	Signature:		

In Witness Whereof I have executed this ass	signment on August 25 2014. (Month, Day) (Year)
Christine Salstrom Terpsma (Name of Inventor)	(Signature of Inventor)
UNITED ST.	ATES OF AMERICA
State of Washington County of King	
I certify that I know or have satisfactory evi	idence that Christine Salstrom Terpsma Name of Signer
	is the person who appeared before me, and said person acknowledged that he/she signed this instrument and acknowledged it to be his/her free and voluntary act for the uses and purposes mentioned in the instrument.
	Dated: ftugiust みらか 2014 Month/Day/Year
	Nelda De Signature of Notarizing Officer
Notary Public State of Washington MELINDA A SHIPLEY My Appointment Expires Mar 7, 2015	Nothing Public
	My appointment expires:
Place Notary Seal and/or Stamp Above	Month/Day/Year of Appointment Expiration

In Witness Whereof I have executed t	this assignment on		2014.
		(Month, Day)	(Year)
Arthur Carl Hewig III			
(Name of Inventor)		(Signature of Inven	tor)
UNITE	ED STATES OF AM	ERICA	
State of California			
County of <u>Ventura</u>			
On	before me,		
Notary Public, personally appeared			
	Arthur Carl Hewig III	[·
	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 seent 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
		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 this assignment on		2014.
	(Day, Mon	th) (Year)
Joseph Edward Shultz		
(Name of Inventor)	(Signature of I	
Place of Execution:		
Witness 1:	Witness 2:	
Signature:	Signature:	
Date:	Date:	
Name:	Name:	
Address:	Address:	
City:	City:	
Country:	Country:	

ASSIGNMENT

Whereas, I/we,	Eva Fan Gefroh residing at 8122 126th Place SE, Newcastle, Washington 98056 United States of America
	Randolph Whitfield Schweickart residing at 13258 NE 145th Place,
	Woodinville, Washington 98072 United States of America
	Krista Marie Petty residing at 1710 W. Hillcrest Drive, Apt. #7, Newbury Park,
	California 91320 United States of America
	Gregory Thomas Frank residing at 1758 Red Robin Place, Thousand Oaks,
	California 91320 United States of America
	Christine Salstrom Terpsma residing at 18242 58th Avenue NE, Kenmore,
	Washington 98028 United States of America
	Arthur Carl Hewig III residing at 951 Remington Place, Newbury Park,
	California 91320 United States of America
	Joseph Edward Shultz residing at Baslerstrasse 5A, Binningen – 4102,
	Switzerland

(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

PROCESS CONTROL SYSTEMS AND METHODS FOR USE WITH FILTERS AND FILTRATION PROCESSES

which is found in:

US Provisional Application No. 61/992,595 filed May 13, 2014.

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

1

PATENT REEL: 040284 FRAME: 0533 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, 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	s assignment on		2014.
		(Month, Day)	(Year)
Eva Fan Gefroh			
(Name of Inventor)		(Signature of Inver	ntor)
UNITED	STATES OF AMI	ERICA	
State of Washington			
County of <u>King</u>			
I certify that I know or have satisfactory	y evidence that	Eva Fan Gefroh Name of Signer	
	is the perso	n who appeared before	me, and said
		nowledged that he/she	
	instrument	and acknowledged it	to be his/he
	free and vol	untary act for the uses	and purpose
	mentioned i	n the instrument.	
	Datad		
	vaneu.	Month/Day/Year	
		Signature of Notarizing Offic	cer
		Title	······································
	My appoints	nent expires:	
Place Notary Scal and/or Stamp Above	Monti	n/Day/Year of Appointment Ex	niration

In Witness Whereof I have executed this as	signment on2014. (Month, Day) (Year
	(Monus, Day) (1 car
Randolph Whitfield Schweickart	
(Name of Inventor)	(Signature of Inventor)
UNITED ST	TATES OF AMERICA
State of Washington	
County of King ss.	
I certify that I know or have satisfactory en	ridence that Randolph Whitfield Schweickart Name of Signer
	is the person who appeared before me, and sa
	person acknowledged that he/she signed th
	instrument and acknowledged it to be his/h
	free and voluntary act for the uses and purpose mentioned in the instrument.
	Dated:
	Month/Day/Year
	Signature of Notarizing Officer
	Title
	My appointment expires:
Place Notary Seal and/or Stamp Above	Month/Day/Year of Appointment Expiration

In Witness Whereof I have exec	uted this assignment on		2014.
		(Month, Day)	(Year)
Krista Marie Petty			
(Name of Inventor))	(Signature of Inven	itor)
U	NITED STATES OF AM	ERICA	
State of California			
County of <u>Ventura</u>	> :		
On	before me,		
Notary Public, personally appear			
	Krista Marie Petty		
	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 a ent and acknowledged the the same in his/her/the that by his/her/their signerson(s), or the entity n(s) acted, executed the	subscribed to o me that he/ oir authorized gnature(s) on upon behalf
	•	ENALTY OF PERJUR e of California that the nd correct.	
	WITNESS my han	ad and official seal.	
Place Notary Seal Above	Signature:		****

In Witness Whereof I have executed this assignment on			2014.
		(Month, Day)	(Year)
Gregory Thomas F	rank		
(Name of Invento	or)	(Signature of Inven	tor)
	UNITED STATES OF A	MEDICA	
	OLYMPIAN OFFICE STATES OF THE	VARIANA NA	
State of California	}		
County of Ventura	<i>§</i>		
On	before me,		······································
Notary Public, personally appe	eared		
	Gregory Thomas Fra	nk	
	to be the person the within instru she/they execute capacity(ies), an the instrument the	ne on the basis of satisfact (s) whose name(s) is/are sument and acknowledged to the same in his/her/the id that by his/her/their sight person(s), or the entity son(s) acted, executed the	subscribed to o me that he/ ir authorized anature(s) on upon behalf
	*	PENALTY OF PERJUR ate of California that the and correct.	
	WITNESS my h	and and official seal.	
Place Notary Seal Above	Signature:		

In Witness Whereof I have execute	assignment on2014. (Month, Day) (Year)
	(Month, Day) (Year)
Christine Salstrom Terpsn	
(Name of Inventor)	(Signature of Inventor)
UNI	STATES OF AMERICA
State of Washington	
County of King	
I certify that I know or have satisfa	evidence that Christine Salstrom Terpsma Name of Signer
	is the person who appeared before me, and said
	person acknowledged that he/she signed thi
	instrument and acknowledged it to be his/he
	free and voluntary act for the uses and purpose
	mentioned in the instrument.
	Dated:
	Month/Day/Year
	Signature of Notarizing Officer
	Title
	My appointment expires:
Place Notary Seal and/or Stamp Above	Month/Day/Year of Appointment Expiration

In Witness Whereof I have executed this assignment on		2014.	
	-	(Month, Day)	(Year)
Arthur Carl Hewig II	1		
(Name of Inventor)		(Signature of Inven	itor)
U	NITED STATES OF AM	ERICA	
State of California			
County of Ventura			
On	before me,		······································
Notary Public, personally appear	ed		
	Arthur Carl Hewig III		
	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 a ent and acknowledged the same in his/her/the that by his/her/their signerson(s), or the entity n(s) acted, executed the	subscribed to to me that he/ tir authorized gnature(s) on upon behalf
		ENALTY OF PERJUR of California that the nd correct.	
	WITNESS my han	nd and official seal.	
Place Notary Seal Above	Signature:		

In Witness Whereof I have executed this assignment on		
Joseph Edward Shultz (Name of Inventor)	(Signature of Inventor)	
Place of Execution:	Switzerland	
Witness 1: Signature: 0/6	Witness 2: Signature:	
Date: 1 Jugust 2014	C'th.	
Name: LALS PAUPEL	Name: XZMIN LOPES	
Address: HOHLWEG /	Address: 16 GLOGGLINOF	
City: RIEHEN	City: <u>Rieheri</u> 4125	
Country: 601725RLAND	Country: SWITZERLAND	