

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3477879

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	Jerry Shevitz	06/02/2014
RECEIVING PARTY DATA		
Name:	REPLIGEN CORPORATION	
Street Address:	41 SEYON STREET	
Internal Address:	BUILDING #1, SUITE 100	
City:	WALTHAM	
State/Country:	MASSACHUSETTS	
Postal Code:	02453	
PROPERTY NUMBERS Total: 1		
	Property Type	Number
	Application Number:	14733417
CORRESPONDENCE DATA		
Fax Number:	(877)769-7945	
<i>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.</i>		
Phone:	(617) 956-5911	
Email:	apsi@fr.com	
Correspondent Name:	NATALIE K. GALLEY	
Address Line 1:	FISH & RICHARDSON P.C.	
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ATTORNEY DOCKET NUMBER:	00231-0165002	
NAME OF SUBMITTER:	CHRISTINE M. GRACE	
SIGNATURE:	/Christine M. Grace/	
DATE SIGNED:	08/11/2015	
Total Attachments: 10		
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PATENT RIGHTS ASSIGNMENT

This Patent Rights Assignment (this "Assignment") is made effective this 2nd day of June, 2014, by and between **Jerry Shevitz**, having an address at c/o Refine Technology, LLC, 26 Chapin Road, Unit 1107, Pine Brook, NJ 07058 ("Assignor"), and **Repligen Corporation**, a corporation organized and existing under the laws of Delaware, and having a usual place of business at 41 Seyon Street, Building #1, Suite 100, Waltham, MA 02453 ("Assignee"). Capitalized terms used but not defined herein shall have the meanings for such terms that are set forth in the Purchase Agreement (as defined below).

WHEREAS, Assignor possesses certain rights in and to the patents and patent applications (and patents issuing on such applications) set forth on Exhibit A attached hereto and incorporated herein by reference (collectively, the "Patent Rights") and the invention(s) described and/or claimed in the Patent Rights (the "Inventions"); and

WHEREAS, Assignor and Assignee are parties to that certain Asset Purchase Agreement, dated as of the date hereof (the "Purchase Agreement"), pursuant to which Assignor transferred, sold and conveyed to Assignee certain of the assets of Assignor, including the Inventions and Patent Rights;

WHEREAS, Assignor now wishes to assign the Inventions and Patent Rights to Assignee, and Assignee desires to acquire the Inventions and Patent Rights from Assignor; and

WHEREAS, the execution and delivery of this Assignment is a condition to the Closing under the Purchase Agreement.

NOW, THEREFORE, in consideration of the premises set forth above and in the Purchase Agreement and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged:

Assignor does hereby sell, assign, convey and transfer unto Assignee and its successors, assigns and legal representatives, Assignor's entire right, title and interest in and throughout the world in and to the Inventions, together with Assignor's entire right, title and interest in and to the Patent Rights and such other patents as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of patents and patent applications within the Patent Rights or such other patents, and any right, title and interest Assignor may have in applications to which the Patent Rights claim priority; the Inventions and the Patent Rights to be held and enjoyed by Assignee for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said patents may be granted as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made; and Assignor hereby conveys all of his rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. Assignor hereby acknowledges that this assignment, being of Assignor's entire right, title and interest in and to the Inventions and the Patent Rights carries with it the right in Assignee to apply for and obtain from competent authorities in all countries of the world any and all patents by attorneys and agents of Assignee's selection and the right to procure the grant of all patents to Assignee in its own name as assignee of Assignor's entire right, title and interest therein. Ownership of divisionals and continuations

whose claims specifically refer to hemodialysis, peritoneal dialysis, in vivo and ex vivo fluid modification, hemodiafiltration and/or hemofiltration may be transferred to Refine Technology, LLC as contemplated by Section 4 of that certain License Agreement, dated the date hereof, by and between Assignor and Assignee.

Assignor hereby further agrees for itself and its successors, assigns, agents, and legal representatives to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the Patent Rights to Assignee, its successors, assigns, and legal representatives, as well as to third parties at the request of Assignee including the execution of documents (including, without limitation, petitions, specifications, oaths, assignments, disclaimers, declarations and affidavits) relating to non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications within the Patent Rights, as requested by Assignee, and generally use Assignor's commercially reasonable efforts to aid Assignee, its successors, assigns and legal representatives to obtain, record, maintain, and enforce full protection for the Inventions in all countries, but in each instance at Assignee's reasonable expense.

Assignor hereby further agrees to provide documentary evidence and statements or testimony in any interference, opposition, re-examination, reissue or other proceeding in which any of the Patent Rights may be involved, but in each instance at Assignee's reasonable expense.

Assignor does hereby authorize the Director of the United States Patent & Trademark Office, and the empowered officials of all other governments whose duty it is to record patents, applications and title thereto, to record the Patent Rights and title thereto as the property of Assignee, its successors, assigns, or legal representatives in accordance with the terms of this instrument.

Assignor does hereby further authorize and request the Director of the United States Patent and Trademark Office and the empowered officials of all other governments to issue such Patent Rights or patents as shall be granted upon the Patent Rights, or applications based thereon, to Assignee, its successors, assigns, or legal representatives.

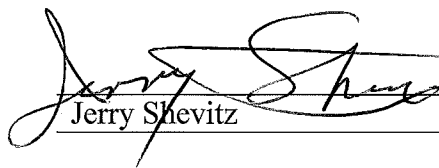
Assignee and Assignor also agree that multiple copies of this Assignment may be executed, each of which shall be deemed an original, and each of which shall be valid and binding upon Assignee and Assignor. In the event of any conflict or inconsistency between the terms of the Purchase Agreement and the terms hereof, the terms of the Purchase Agreement shall govern.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, Assignor and Assignee have caused this Assignment to be executed by their duly authorized representatives as of the date first written above.

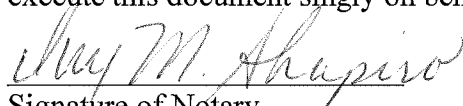
ASSIGNOR:

Name:


Jerry Shevitz

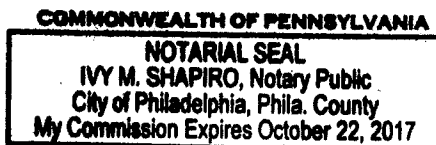
NOTARIZATION

On this 2nd day of June, 2014, before me, the undersigned Notary Public, personally appeared Jerry Shevitz, proved to me through satisfactory evidence of identification, which was/were right, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief. The above-indicated individual is duly authorized to execute this document singly on behalf of Assignor and executed this document of his/her own free will.


Signature of Notary

(Seal)

My Commission Expires: 10-22-2017



ASSIGNEE: REPLIGEN CORPORATION

Name:

Walter Herlihy

Signature:

[Signature]

Title:

Chief Executive Officer & President

NOTARIZATION

On this 2 day of June, 2014, before me, the undersigned Notary Public, personally appeared Walter Herlihy, proved to me through satisfactory evidence of identification, which was/were MA Drivers License, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief. The above-indicated individual is duly authorized to execute this document singly on behalf of Assignee and executed this document of his/her own free will.

Elaine M. Vallante

Signature of Notary

(Seal)

My Commission Expires:

July 14, 2017

[Signature Page to Patent Rights Assignment]

Exhibit A

PATENT RIGHTS

Title	Screen Filter Module for Alternating Flow Filtration
Country	USA
Priority Date	September 24, 2008
Filing Date	September 23, 2009
Application Number	12/565,605
Granted Patent Number	N/A
Status	Request for Continued Examination filed on 12/07/2012. Pending (First Action Prediction: 3 Months as of 05/29/14).
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication Number	US 2010/0078395 A1
Next Required Action	No Action Required At This Time.
Next Maintenance/ Renewal Fee Due	Triggered when patent issues.

Title	Screen Filter Module for Alternating Flow Filtration
Country	European Patent Office
Priority Date	September 24, 2008
Filing Date	September 23, 2009 (PCT/US2009/05288) April 15, 2011 in EPO
Application Number	09816573.1
Granted Patent Number	N/A
Status	Per the most recent Office Action, the claims are considered to be allowable, but formalities must be attended to. A Response was filed on 3/21/14 to bring specification and abstract into conformity with the claims.
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based.	WO 2010/036338 A1
Next Required Action	No Action Required At This Time.
Next Maintenance/ Renewal Fee Due	6 th Renewal Fee Due By September 30, 2014.

Title	Screen Filter Module for Alternating Flow Filtration
Country	China
Priority Date	September 24, 2008
Filing Date	September 23, 2009 (PCT/US2009/05288) March 24, 2011 in China
Application Number	200980137617.5
Granted Patent Number	200980137617.5
Status	Patent Issued April 16, 2014
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2010/036338 A1
Next Required Action	No Action Required At This Time (Awaiting the Patent Certificate from the SIPO).
Next Maintenance/ Renewal Fee Due	Annual fee for the 6 th year is due September 23, 2014.

Title	Screen Filter Module for Alternating Flow Filtration
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Country	Brazil
Priority Date	September 24, 2008
Filing Date	September 23, 2009 (PCT/US2009/05288) March 24, 2011 in Brazil
Application Number	PI0919243-3
Granted Patent Number	N/A
Status	5 th Renewal Fee Paid on 12/18/2013. Pending (Examination Requested).
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2010/036338 A1
Next Required Action	No Action Required At This Time (Awaiting First Office Action).
Next Maintenance/ Renewal Fee Due	6 th Renewal Fee Due By December 23, 2014

Title	Screen Filter Module for Alternating Flow Filtration
Country	Korea
Priority Date	September 24, 2008
Filing Date	September 23, 2009 (PCT/US2009/05288) April 22, 2011 in Korea
Application Number	2011-7009234
Granted Patent Number	N/A
Status	Pending
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2010/036338 A1
Next Required Action	The due date for filing a request for examination is September 23, 2014.
Next Maintenance/ Renewal Fee Due	Triggered upon decision to grant.

Title	Screen Filter Module for Alternating Flow Filtration
Country	Canada
Priority Date	September 24, 2008
Filing Date	September 23, 2009 (PCT/US2009/05288) March 24, 2011 in Canada
Application Number	2737160
Granted Patent Number	N/A
Status	Pending
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2010/036338 A1
Next Required Action	Request Examination by September 23, 2014.
Next Maintenance/ Renewal Fee Due	5 th Year Maintenance Fee Due By September 23, 2014.

Title	Screen Filter Module for Alternating Flow Filtration
Country	India
Priority Date	September 24, 2008
Filing Date	September 23, 2009 (PCT/US2009/05288) March 22, 2011 in India
Application Number	2156/DELNP/2011
Granted Patent Number	N/A
Status	Pending (Examination Requested)

Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2010/036338 A1
Next Required Action	Applicants of pending applications are under a continued duty to file foreign application data on bi-annual basis for all pending cases.
Next Maintenance/ Renewal Fee Due	The annuity fee is due within three months from the date the granted patent is recorded in the Register of Patents.

Title	Fluid Filtration Systems a/k/a: Enclosed Bioreactor Application
Country	USA
Priority Date	August 25, 2010
Filing Date	August 24, 2011 (PCT/US2011/001485) February 24, 2013 in USA
Application Number	13/818,679
Granted Patent Number	N/A
Status	Pending (First Action Prediction: 23 Months as of 05/29/14).
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2012/026978 A2
Next Required Action	File Information Disclosure Statement.
Next Maintenance/ Renewal Fee Due	Triggered when patent issues.

Title	Fluid Filtration Systems a/k/a: Enclosed Bioreactor Application
Country	European Patent Office
Priority Date	August 25, 2010
Filing Date	August 24, 2011 (PCT/US2011/001485) March 19, 2013 in Europe
Application Number	11820281.1
Granted Patent Number	N/A
Status	Pending (Claim Amendments Filed on 10/17/13).
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2012/026978 A2
Next Required Action	No Action Required At This Time (Awaiting Office Action).
Next Maintenance/ Renewal Fee Due	4 th Year Renewal Fee Due By August 31, 2014

Title	Fluid Filtration Systems a/k/a: Enclosed Bioreactor Application
Country	China
Priority Date	August 25, 2010
Filing Date	August 24, 2011 (PCT/US2011/001485) April 24, 2013 in China
Application Number	201180051283.7
Granted Patent Number	N/A
Status	Pending (The Application has entered into the Substantive Examination Procedure).
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2012/026978 A2
Next Required Action	No Action Required At This Time (Awaiting Office Action).
Next Maintenance/ Renewal Fee Due	The next annual fee and the payment deadline will be determined when the

	application is granted by the Chinese Patent Office.
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Title	Fluid Filtration Systems a/k/a: Enclosed Bioreactor Application
Country	Japan
Priority Date	August 25, 2010
Filing Date	August 24, 2011 (PCT/US2011/001485) February 28, 2013 in Japan
Application Number	2013-525895
Granted Patent Number	N/A
Status	Pending
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2012/026978 A2
Next Required Action	Request Examination By August 24, 2014.
Next Maintenance/ Renewal Fee Due	Triggered upon decision to grant.

Title	Fluid Filtration Systems a/k/a: Enclosed Bioreactor Application
Country	Brazil
Priority Date	August 25, 2010
Filing Date	August 24, 2011 (PCT/US2011/001485) February 25, 2013 in Brazil
Application Number	BR112013004434-9
Granted Patent Number	N/A
Status	Pending
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2012/026978 A2
Next Required Action	Request Examination by August 24, 2014.
Next Maintenance/ Renewal Fee Due	4 th Renewal Fee Due By August 24, 2014 and can be paid without fine until November 24, 2014.

Title	Fluid Filtration Systems a/k/a: Enclosed Bioreactor Application
Country	Korea
Priority Date	August 25, 2010
Filing Date	August 24, 2011 (PCT/US2011/001485) March 25, 2013 in Korea
Application Number	2013-7007517
Granted Patent Number	N/A
Status	Pending
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2012/026978 A2
Next Required Action	The due date for filing a request for examination is August 24, 2016.
Next Maintenance/ Renewal Fee Due	Triggered upon decision to grant.

Title	Fluid Filtration Systems a/k/a: Enclosed Bioreactor Application
Country	Canada
Priority Date	August 25, 2010

Filing Date	August 24, 2011 (PCT/US2011/001485) February 7, 2013 in Canada
Application Number	2807768
Granted Patent Number	N/A
Status	Pending
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2012/026978 A2
Next Required Action	Request Examination By August 24, 2016.
Next Maintenance/ Renewal Fee Due	3 rd Maintenance Fee Due By August 24, 2014.

Title	Fluid Filtration Systems a/k/a: Enclosed Bioreactor Application
Country	India
Priority Date	August 25, 2010
Filing Date	August 24, 2011 (PCT/US2011/001485) February 12, 2013 in India
Application Number	1308/DELNP/2013
Granted Patent Number	N/A
Status	Pending
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication number of PCT application upon which this application is based	WO 2012/026978 A2
Next Required Action	Request Examination By August 25, 2014. Applicants of pending applications are under a continued duty to file foreign application data on bi-annual basis for all pending cases.
Next Maintenance/ Renewal Fee Due	The annuity fee is due within three months from the date the granted patent is recorded in the Register of Patents.

Title	Device, System and Process for Modification or Concentration of Cell-Depleted Fluid a/k/a: Two ATF Systems In Series
Country	USA
Priority Dates	August 25, 2010, and August 24, 2011
Filing Date	February 29, 2012
Application Number	13/408,243 (CIP of PCT/US2011/001485)
Granted Patent Number	N/A
Status	Pending (Restriction Requirement Issued 4/23/14)
Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication Number	US 2013-0059371 A1
Next Required Action	Response to Restriction Requirement Due By 6/23/14 (2 month deadline). File Information Disclosure Statement.
Next Maintenance/ Renewal Fee Due	Triggered when patent issues.

Title	Device, System and Process for Modification or Concentration of Cell-Depleted Fluid a/k/a: Two ATF Systems In Series
Country	PCT (with option to file in multiple countries)
Priority Date	February 29, 2012
Filing Date	February 27, 2013
Application Number	PCT/US2013/00050 (Based on US CIP of PCT/US2011/001485)
Granted Patent Number	N/A
Status	Pending

Registered Inventor or Assignee	Inventor is Jerry Shevitz
Publication Number	WO/2013/130176 A1
Next Required Action	File National Phase Applications By August 29, 2014 (30 Month Date).
Next Maintenance/ Renewal Fee Due	N/A