

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT2902155

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
HYCLONE LABORATORIES, INC.	03/21/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	LIFE TECHNOLOGIES CORPORATION
<b>Street Address:</b>	5791 VAN ALLEN WAY
<b>City:</b>	CARLSBAD
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	92008
<b>PROPERTY NUMBERS Total: 54</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	5799830
Patent Number:	5941635
Patent Number:	7153021
Patent Number:	7278780
Patent Number:	7284579
Patent Number:	7588161
Patent Number:	7992598
Patent Number:	8272410
Patent Number:	7225824
Patent Number:	8603805
Patent Number:	7879599
Patent Number:	8124403
Patent Number:	7487688
Patent Number:	7878079
Patent Number:	7938454
Patent Number:	7168459
Patent Number:	8455242
Patent Number:	8641314
Patent Number:	8506198
Patent Number:	8608369
Patent Number:	7384783

PATENT

Property Type	Number
Patent Number:	7682067
Patent Number:	7901934
Patent Number:	8187867
Patent Number:	8623640
Application Number:	14094541
Application Number:	13013479
Application Number:	12597126
Application Number:	13900383
Application Number:	14088140
Application Number:	13162248
Application Number:	12986701
Application Number:	14075933
Application Number:	13659616
Application Number:	14131872
Application Number:	13631448
Application Number:	13449101
Application Number:	13251828
Application Number:	13849361
Application Number:	13686400
Application Number:	13970387
Application Number:	61928091
Application Number:	14109684
PCT Number:	US1261708
PCT Number:	US1328059
PCT Number:	US1246095
PCT Number:	US1258086
PCT Number:	US1256917
PCT Number:	US1256929
PCT Number:	US1331608
PCT Number:	US1327819
PCT Number:	US1332528
PCT Number:	US1371917
PCT Number:	US1355618

**CORRESPONDENCE DATA**

Fax Number: (801)328-1707

*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: 801.533.9800

Email: dwilson@wnlaw.com

**PATENT**

**Correspondent Name:** DANA L. TANGREN  
**Address Line 1:** 60 EAST SOUTH TEMPLE, SUITE 1000  
**Address Line 4:** SALT LAKE CITY, UTAH 84111

**ATTORNEY DOCKET NUMBER:** 11398.187

**NAME OF SUBMITTER:** DANA L. TANGREN

**SIGNATURE:** /dana l. tangren/

**DATE SIGNED:** 06/17/2014

**Total Attachments: 8**

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## PATENT

### ASSIGNMENT

In consideration of Ten Dollars (\$10.00), and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned, **HyClone Laboratories, Inc., a Utah corporation having** a place of business at 925 West 1800 South, Logan, Utah 84321 (“Assignor”), and which is the owner of the entire right, title and interest in and to all patents and patent applications identified on **Schedule A attached hereto** and is a joint owner of the patents and patent application identified on **Schedule B attached hereto (the patents and patent applications listed in attached Schedule A and Schedule B hereinafter being cumulatively referred to as the “Patents”)**;

**Hereby** sells, assigns and transfers to **Life Technologies Corporation**, which has a place of business at 5791 Van Allen Way, Carlsbad, CA 92008 (“Assignee”), and its successors and assigns, Assignor’s entire right, title, dominion and interest in and to the Patents and in and to any and all inventions that are disclosed and claimed in the Patents, and in and to any and all inventions that are disclosed but not claimed in the Patents and in and to any and all continuation, continuation-in-part, divisional, substitute, reexamination, renewal, and reissue applications of any of the Patents and in and to all US, International, and foreign patent applications that claim priority to any of the Patents and in and to all other applications for a patent or patents or other related property rights directed to inventions disclosed in the Patents and in the right to sue for and collect damages for past, present and future infringement of any of the Patents;

**Authorizes** and requests the Director of Patents of the United States of America to issue to the Assignee, its successors, assigns and legal representatives, in accordance with this assignment, any and all patents on any inventions disclosed or claimed in the aforementioned patent applications;

**Agrees** that the Assignee may apply for and receive patents or rights of any other kind for inventions described in the above-referenced patents and patent applications in any jurisdiction and may claim, in applications for foreign patents or other rights, the priority of the aforesaid patent application(s) under the provisions of the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention or under any other available international agreement; and

**Represents** to the Assignee, its successors, assigns and legal representatives that the Assignor has not and shall not execute any writing or do any act whatsoever that conflicts with this Assignment and that, when requested, without charge to, but at the expense of, Assignee, its successors, assigns and legal representatives, the Assignor will carry out in good

faith the intent and purpose of this Assignment, and the undersigned or the undersigned's executors or administrators will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications or other documents on any and all inventions disclosed or claimed in the Patents; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to the Assignee, its successor, assigns and representatives, all facts known and documents available to the undersigned relating to said inventions and the history thereof; testify in all legal proceedings; and generally do everything possible that the Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said inventions and for vesting title to said inventions and all applications for patents on said inventions, in the Assignee, its successors, assigns and legal representatives.

*[THIS SPACE IS INTENTIONALLY LEFT BLANK.]*

**HyClone Laboratories, Inc.**

Date: March 21, 2014

By: *Maura A. Spellman*  
Name: Maura A. Spellman  
Title: Assistant Treasurer

Accepted by:

**Life Technologies Corporation**

Date: March 21, 2014

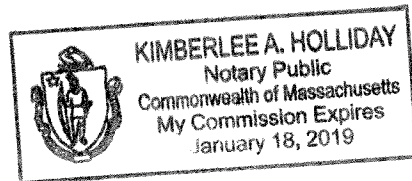
By: *Maura A. Spellman*  
Name: Maura A. Spellman  
Title: Assistant Treasurer

Commonwealth of Massachusetts }  
County of Middlesex } ss

On this the 21<sup>st</sup> day of March, 2014, before me, Kimberlee A. Holliday, the undersigned Notary Public, personally appeared Maura A. Spellman, proved to me through satisfactory evidence of identification, which was based on personal knowledge, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose as Assistant Treasurer for Life Technologies Corporation, a Delaware corporation.

Before me,

*Kimberlee A. Holliday*  
Signature of Notary Public



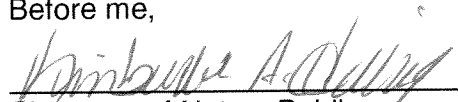
Kimberlee A. Holliday  
Printed Name of Notary

My Commission Expires: January 18, 2019

Commonwealth of Massachusetts }  
County of Middlesex } ss

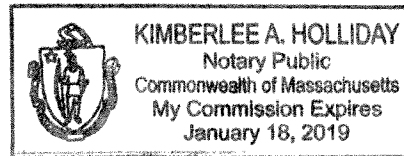
On this the 21<sup>st</sup> day of March, 2014, before me, Kimberlee A. Holliday, the undersigned Notary Public, personally appeared Maura A. Spellman, proved to me through satisfactory evidence of identification, which was based on personal knowledge, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose as Assistant Treasurer for Hyclone Laboratories, Inc., a Utah corporation.

Before me,

  
\_\_\_\_\_  
Signature of Notary Public

Kimberlee A. Holliday  
Printed Name of Notary

My Commission Expires: January 18, 2019



## Schedule A

DIAMS Docket Number	Title	Application Number	Application Date	Patent Number	GrantDate
9752US1/NAT	Pressure Vessel Access Port	08/744418	11/8/1996	5799830	9/1/1998
9754US1/NAT	Mixing Block for Resuspension System	09/009287	1/20/1998	5941635	8/24/1999
9756US1/NAT	Container systems for mixing fluids with a magnetic stir bar	10/797159	3/10/2004	7153021	12/26/2006
9756US2/NAT	Container systems for mixing fluids with a magnetic stir bar	11/390729	3/28/2006	7278780	10/9/2007
9762US1/NAT	Fluid Storage and Dispensing Bins	10/810156	3/26/2004	7284579	10/23/2007
9762US2/NAT	Fluid Dispensing Bins	11/865504	10/1/2007	7588161	9/15/2009
9762US3/NAT	Fluid Bin Assembly with Hoist	12/559359	9/14/2009	7992598	8/9/2011
9762US4/NAT	Fluid Bin Assembly with Hoist	13/183060	7/14/2011	8272410	9/25/2012
9780US1/NAT	Dip Tube Anchor Assembly and Related Container	10/954090	9/29/2004	7225824	6/5/2007
9782US5/NAT	Gas Spargers and Related Container Systems	11/385541	3/20/2006	8603805	12/10/2013
9782US6/NAT	Tube Ports and Related Container Systems	11/385629	3/20/2006	7879599	2/1/2011
9782US7/NAT	Tube Ports and Related Container Systems	12/983606	1/3/2011	8124403	2/28/2012
9813US1/NAT	Sampling Ports and Related Container Systems	11/385626	3/20/2006	7487688	2/10/2009
9813US2/NAT	Sampling Ports and Related Container Systems	12/357817	1/22/2009	7878079	2/1/2011
9818US1/NAT	Sterile Connector Systems	11/739433	4/24/2007	7938454	5/10/2011
9820US1/PCT	Sterile Connector Systems	12/597126	4/23/2008		
9829US1/NAT	Feed Bags and Methods of Use	10/402250	3/28/2003	7168459	1/30/2007
9836US1/NAT	Mixing System with Condenser	12/710127	2/22/2010	8455242	6/4/2013
9841US1/NAT	Quick Coupling for Drive Shaft	12/697824	2/1/2010	8641314	2/4/2014
9845US1/NAT	Self Aligning Coupling for Mixing System	12/697771	2/1/2010	8506198	8/13/2013
9851US1/NAT	Methods and Apparatus for Heating and Mixing Fluids	12/986734	1/7/2011	8608369	12/17/2013
11111US1/PCT	Manifold System	14/131872	7/10/2012		
11111WO1/PCT	Manifold System	PCT/US2012/046095	7/10/2012		

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PATENT  
REEL: 033188 FRAME: 0649



Schedule A

DIAMS Docket Number	Title	Application Number	Application Date	Patent Number	Grant Date
13512WO1/PCT	FILTER SYSTEMS FOR SEPARATING MICROCARRIERS FROM CELL CULTURE SOLUTIONS	PCT/US2012/056917	9/24/2012		
13512US1/NAT	FILTER SYSTEMS FOR SEPARATING MICROCARRIERS FROM CELL CULTURE SOLUTIONS	13/449101	4/17/2012		
13529US1/NAT	DISPOSABLE PLUG AND SENSOR FITTINGS FOR BIOREACTOR BAGS	13/251828	10/3/2011		
13529WO1/PCT	DISPOSABLE PLUG AND SENSOR FITTINGS FOR BIOREACTOR BAGS	PCT/US2012/056929	9/24/2012		
13710US1/NAT	CONTAINER WITH FILM SPARGER	13/631448	9/28/2012		
13710WO1/PCT	CONTAINER WITH FILM SPARGER	PCT/US2012/058086	9/28/2012		
14576US1/NAT	FLUID MIXING SYSTEMS AND ADJUSTABLE IMPELLER	13/659616	10/24/2012		
14576WO1/PCT	FLUID MIXING SYSTEMS AND ADJUSTABLE IMPELLER	PCT/US2012/061708	10/24/2012		
15835WO1/PCT	SYSTEMS AND CONTAINERS FOR STERILIZING A FLUID	PCT/US2013/028059	2/27/2013		
15922US1/NAT	MIXING SYSTEM WITH DRIVE SHAFT STEADY SUPPORT	13/849361	3/22/2013		
15980WO1/PCT	FLUID MIXING SYSTEM WITH FLEXIBLE DRIVE LINE AND FOLDABLE IMPELLER	PCT/US2013/031608	3/14/2013		
16010WO1/PCT	METHODS AND APPARATUS FOR GAS STREAM MASS TRANSFER WITH A LIQUID	PCT/US2013/032528	3/14/2013		
16352WO1/PCT	FLUID MIXING SYSTEM WITH TILTABLE SUPPORT HOUSING	PCT/US2013/27819	2/26/2013		
16690US1/NAT	FLUID MANIFOLD SYSTEM WITH ROTATABLE PORT ASSEMBLY	13/970387	8/19/2013		
16690WO1/PCT	FLUID MANIFOLD SYSTEM WITH ROTATABLE PORT ASSEMBLY	PCT/US2013/055618	8/19/2013		
17075US1/NAT	LOAD CELL LOCKOUTS AND RELATED FLUID DISPENSING SYSTEMS	13/686400	11/27/2012		
17075WO1/PCT	LOAD CELL LOCKOUTS AND RELATED FLUID DISPENSING SYSTEMS	PCT/US2013/071917	11/26/2013		
18743P1/NAT	REACTOR FOAM SENSOR SYSTEMS AND METHODS OF USE	61/928091	1/16/2014		

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## Schedule A

DIAMS Docket Number	Title	Application Number	Application Date	Patent Number	GrantDate
9782US9/NAT	Gas Spargers and Related Container Systems	14/094541	12/2/2013		
9813EP1/EPC	Sampling Ports and Related Container Systems	7251179.3	3/20/2007		
9813US3/NAT	Sampling Ports and Related Container Systems	13/013479	1/25/2011		
9836US2/NAT	METHODS FOR CONDENSING A HUMID GAS	13/900383	5/22/2013		
9836US3/NAT	HEAT EXCHANGER SYSTEM WITH FLEXIBLE BAG	14/088140	11/22/2013		
9839US1/NAT	Fluid Mixing System with Hangers	13/162248	6/16/2011		
9849US1/NAT	Methods and Apparatus for Mixing and Shipping Fluids	12/986701	1/7/2011		
9851US2/NAT	Methods and Apparatus for Heating and Mixing Fluids	14/075933	11/8/2013		

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**PATENT**  
**REEL: 033188 FRAME: 0651**

## Schedule B

DIAMS Docket Number	Title	Application Number	Application Date	Patent Number	GrantDate
9782US1/NAT	Stirred Tank Reactor System	11/112834	4/22/2005	7384783	6/10/2008
9782US2/NAT	Mixing Systems and Related Mixers	11/379535	4/20/2006	7682067	3/23/2010
9782US3/NAT	Probe Connector Assembly and Method of Use	12/116050	5/6/2008	7901934	3/8/2011
9782US4/NAT	Probe Connector Assembly and Method of Use	13/014575	1/26/2011	8187867	5/29/2012
9782US8/NAT	Stirred Tank Reactor Systems and Method of Use	13/443391	4/10/2012	8623640	1/7/2014
9782US10/NAT	Stirred Tank Reactor Systems and Method of Use	14/109684	12/17/2013		

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