# 504627091 11/03/2017 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4673809

SUBMISSION TYPE:		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT			
CONVEYING PARTY D	ΑΤΑ	·			
		Name	Execution Date		
HYCLONE LABORATOR	RIES, INC.		03/21/2014		
RECEIVING PARTY DA	ТА				
Name:	LIFE TEC	LIFE TECHNOLOGIES CORPORATION			
Street Address:	5823 NEV	VTON DRIVE			
City:	CARLSBA	٨D			
State/Country:	CALIFOR	NIA			
Postal Code:	92008				
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PROPERTY NUMBERS	Total: 1		_		
Property Type		Number			
Application Number:	15	803327			
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CORRESPONDENCE D	ΑΤΑ				
Fax Number:	•	)1)328-1707			
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		e e-mail address first; if that is un t that is unsuccessful, it will be se			
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## PATENT

### <u>ASSIGNMENT</u>

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 applications listed in attached 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-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.

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ASSIGNMENT Page 3 of 4

HyClone Laboratories, Inc.

March 21, 2014 Date:

By:

Name: Maura A. Spellman

Title: Assistant Treasurer

Accepted by:

Life Technologies Corporation March 21, 2014 By: Date: Name: Maura A. Spellman

SS

Commonwealth of Massachusetts County of Middlesex

Title: Assistant Treasurer

On this the  $\frac{2}{2}$  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.

Signature of Notary Public

Kimberlee A. Holliday Printed Name of Notary KIMBERLEE A. HOLLIDAY Notary Public Commonwealth of Massachusetts My Commission Expires January 18, 2019

My Commission Expires: January 18, 2019

Commonwealth of Massachusetts] County of Middlesex

SS

On this the  $\frac{21}{21}^{57}$  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



DIAMS Docket		a di atra atra bi	Application Date	Patent Number	GrantDate
Number	Title	Application Number	Date	Patent Number	Grantbate
9752US1/NAT	Pressure Vessel Access Port	08/744418	11/8/1996	5799830	9/1/1998
31 32 334 1 1111	Mixing Block for Resuspension				
9754US1/NAT	System	09/009287	1/20/1998	5941635	8/24/1999
	Container systems for mixing				
9756US1/NAT	fluids with a magnetic stir bar	10/797159	3/10/2004	7153021	12/26/2006
	Container systems for mixing	11/390729	3/28/2006	7778780	10/9/2007
9756US2/NAT	fluids with a magnetic stir bar Fluid Storage and Dispensing	11/330723	3/20/2000	12/0/00	10/ 5/2007
9762US1/NAT	그 가지, 그는 것 같은 것 같은 것 같은 것 같은 것 같은 것 같은 것 같이 많이 많이 같이 같이 같이 없다.	10/810156	3/26/2004	7784579	10/23/2007
3102U31/NA1	Bins 	120/02020	012012004		
9762US2/NAT	Fluid Dispensing Bins	11/865504	10/1/2007	7588161	9/15/2009
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9762U\$3/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
	Dip Tube Anchor Assembly and				e le lana
9780US1/NAT	Related Container	10/954090	9/29/2004	7225824	6/5/2007
	Gas Spargers and Related	44 /30CE 44	3/20/2006	0003000	12/10/2013
9782US5/NAT	Container Systems	11/385541	3/20/2000	6003003	12120/2012
9782U56/NAT	Container Systems	11/385629	3/20/2006	7879599	2/1/201:
5762030/1941	Tube Ports and Related		1		
9782US7/NAT	Container Systems	12/983606	1/3/2011	8124403	2/28/2012
	Sampling Ports and Related				
9813US1/NAT	Container Systems	11/385626	3/20/2006	7487688	2/10/2009
	Sampling Ports and Related				
9813US2/NAT	Container Systems	12/357817	1/22/2009	7878079	2/1/2011
					e lan hai
9818US1/NAT	Sterile Connector Systems	11/739433	4/24/2007	1/338454	5/10/201:
9820US1/PCT	Sterile Connector Systems	12/597126	4/23/2008		
9820031/101	Dienie Connector Systems	122/337220	1 47 257 2000		
9829US1/NAT	Feed Bags and Methods of Use	10/402250	3/28/2003	7168459	1/30/2007
					1
9836US1/NAT	Mixing System with Condenser	12/710127	2/22/2010	8455242	6/4/2013
		2 S			
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	8/13/201
	Methods and Apparatus for	10/00/2224	4 19 19044	000000	17/17/204
9851US1/NAT	Heating and Mixing Fluids	12/986734	1/1/2011	8608369	12/17/201
11111US1/PCT	Manifold System	14/131872	7/10/2012	NO. 1	
11111031/101			1/20/2026		
	Manifold System	PCT/US2012/046095	7/10/2012	1	

HyClone US only

#### Schedule A

Schedule A					
DIAMS Docket Number	Title	Application.Number	Application Date	Patent Number	GrantDate
13512W01/PCT	FILTER SYSTEMS FOR SEPARATING MICROCARRIERS FROM CELL CULTURE SOLUTIONS	PCT/US2012/056917	9/24/2012		
	FILTER SYSTEMS FOR SEPARATING MICROCARRIERS FROM CELL CULTURE			- 	
13512US1/NAT	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 CONTAINER WITH FILM	13/631448	9/28/2012		
13710WO1/PCT		PCT/US2012/058086	9/28/2012		
14576US1/NAT	FLUID MIXING SYSTEMS AND ADJUSTABLE IMPELLER	13/659616	10/24/2012		
14576W01/PCT	FLUID MIXING SYSTEMS AND ADJUSTABLE IMPELLER SYSTEMS AND CONTAINERS	PCT/US2012/061708	10/24/2012		
15835W01/PCT	FOR STERILIZING A FLUID	PCT/US2013/028059	2/27/2013		
5922US1/NAT	MIXING SYSTEM WITH DRIVE SHAFT STEADY SUPPORT	13/849361	3/22/2013		
5980W01/PCT	FLUID MIXING SYSTEM WITH FLEXIBLE DRIVE LINE AND FOLDABLE IMPELLER	PCT/US2013/031608	3/14/2013	· ·	
16010W01/PCT	METHODS AND APPARATUS FOR GAS STREAM MASS TRANSFER WITH A LIQUID	PCT/US2013/032528	3/14/2013		
nin kan yang sang sang sang sang sang sang sang s	FLUID MIXING SYSTEM WITH				
<u>6352W01/PC1</u>	TILTABLE SUPPORT HOUSING FLUID MANIFOLD SYSTEM WITH ROTATABLE PORT	PCT/US2013/27819	2/26/2013		
6690US1/NAT	ASSEMBLY FLUID MANIFOLD SYSTEM	13/970387	8/19/2013		
6690W01/PCT		PCT/US2013/055618	8/19/2013		
and a second	LOAD CELL LOCKOUTS AND RELATED FLUID DISPENSING SYSTEMS	13/686400	11/27/2012		
le l	LOAD CELL LOCKOUTS AND RELATED FLUID DISPENSING SYSTEMS	PCT/US2013/071917	11/26/2013		
	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
9782U59/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		

HyClone US only

# 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		1/7/2014
9782US10/NAT	Stirred Tank Reactor Systems and Method of Use	14/109684	12/17/2013		

HyClone-Baxter US

## PATENT REEL: 044032 FRAME: 0296

RECORDED: 11/03/2017