508276592 12/11/2023

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ION TORRENT SYSTEMS INCORPORATED	11/12/2010

RECEIVING PARTY DATA

Name:	LIFE TECHNOLOGIES CORPORATION
Street Address:	5791 VAN ALLEN WAY
City:	CARLSBAD
State/Country:	CALIFORNIA
Postal Code:	92008

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	18536131	

CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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ATTORNEY DOCKET NUMBER:	TP102415USCON46
NAME OF SUBMITTER:	DENISE WHIGHAM
SIGNATURE:	/Denise Whigham/
DATE SIGNED:	12/11/2023

Total Attachments: 8

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PATENT 508276592 REEL: 065834 FRAME: 0019

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PATENT REEL: 065834 FRAME: 0020

ASSIGNMENT

This ASSIGNMENT is between ION TORRENT SYSTEMS INCORPORATED, a Delaware corporation with a place of business at 5791 Van Allen Way, Carlsbad, CA 92008, and LIFE TECHNOLOGIES CORPORATION, a Delaware corporation having a place of business at 5791 Van Allen Way, Carlsbad, CA 92008.

WHEREAS, ION TORRENT SYSTEMS INCORPORATED is the owner of the entire right, title and interest to the inventions described in the United States Patent Applications, and United States Patents obtained therefor and thereon, listed in Attachment 1 hereto;

AND WHEREAS, LIFE TECHNOLOGIES CORPORATION desires to acquire from ION TORRENT SYSTEMS INCORPORATED the entire right, title and interest in and to said inventions and said applications for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon;

NOW, THEREFORE, for valuable consideration received, the receipt of which is hereby acknowledged, the said assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, applications for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefore and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Union for the Protection of Industrial Property, the same to be held and enjoyed by the said assignee, for its own use and behoof and the use and behoof of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be grated, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, the said assignors hereby covenant and agree to and with the assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, the said assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and the application for

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Letters Patent above-mentioned, and that the same are unencumbered and that the said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, the said assignors hereby covenant and agree to and with the said assignee, its successors, legal representatives and assigns, that the said assignors will, whenever counsel of the said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of the said assignee, its successors, legal representatives and assigns.

AND the said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to the said assignee as the assignee of said inventions and the Letters Patent to be issued thereon for the sole use and behoof of the said assignee, its successors, legal representatives and assigns.

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IN WITNESS WHEREOF, ION TORRENT SYSTEMS INCORPORATED has caused this Assignment to be executed by a duly authorized representative thereof.

ION TORRENT SYSTEMS INCORPORATED

Date: Nov /2, 20/0

By:

Name: Alan W. Hammond

Title: Vice President, Intellectual Property

SIGNATURE of Applicant or Assignee of Record

LIFE TECHNOLOGIES CORPORATION

Date: Nov 12, 2010

By:

Name: Alan W. Hammond

Title: Chief Intellectual Property Counsel

ATTACHMENT 1

Docket No.	Title	Application No.	Filing Date
LT00365 PRO	METHODS AND COMPOSITIONS FOR NUCLEIC ACID LIBRARY PREPARATION, EXON SELECTION, AND AMPLIFICAION	61/011,576	01/21/2008
LT00325 PRO	VERY LARGE SCALE TRANSISTOR ARRAYS FOR DNA SEQUENCING	60/870,073	12/14/2006
LT00325 PRO 2	HYBRID FLUIDIC/ELECTRONIC SYSTEM	60/948,748	07/10/2007
LT00325 PRO 3	ION CONCENTRATION-BASED METHODS AND APPARATUS EMPLOYING LARGE SCALE ISFET ARRAYS	60/956,324	08/16/2007
LT00325	METHODS AND APPARATUS FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	12/002,291	12/14/2007
LT00325.1 CIP	METHODS AND APPARATUS FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	12/002,781	12/17/2007
LT00325.2 CON	METHODS AND APPARATUS FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	12/691,923	01/22/2010
LT00325.3 DIV	METHODS AND APPARATUS FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	12/721,458	03/10/2010
LT00325 PCT	METHODS AND APPARATUS FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	PCT/US2007/025721	12/14/2007
LT00325 AU	METHODS AND APPARATUS FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	2007334393	12/14/2007
LT00325 CA	METHODS AND APPARATUS FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	2672315	12/14/2007

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LT00325 CN				
FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	LT00325 CN	FOR MEASURING ANALYTES USING LARGE SCALE FET	200780051353.2	12/14/2007
FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	LT00325 EP	FOR MEASURING ANALYTES USING LARGE SCALE FET	07867780.4	12/14/2007
FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	LT00325 IN	FOR MEASURING ANALYTES USING LARGE SCALE FET	2594/KOLNP/2009	12/14/2007
FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS LT00325 GB	LT00325 JP	FOR MEASURING ANALYTES USING LARGE SCALE FET	2009-541416	12/14/2007
FOR MEASURING ANALYTES USING LARGE SCALE FET ARRAYS	LT00325 SG	FOR MEASURING ANALYTES USING LARGE SCALE FET	200903992-6	12/14/2007
RAPID NUCLEIC ACID 61/196,953 10/22/2008 SEQUENCING	LT00325 GB	FOR MEASURING ANALYTES USING LARGE SCALE FET	0911039.6	12/14/2007
FOR MEASURING ANALYTES	LT00326 PRO	RAPID NUCLEIC ACID	61/196,953	10/22/2008
RAPID NUCLEIC ACID 61/205,626 01/22/2009	LT00326 PRO 2	FOR MEASURING ANALYTES USING LARGE SCALE FET	61/198,222	11/04/2008
FOR MEASURING ANALYTES LT00326.1 METHODS AND APPARATUS FOR MEASURING ANALYTES LT00326 PCT INTEGRATED SENSOR ARRAYS FOR BIOLOGICAL AND CHEMICAL ANALYSIS LT00327 PRO METHODS AND APPARATUS FOR DETECTING MOLECULAR INTERACTIONS USING FET ARRAYS LT00327 PRO METHODS USING FET ARRAYS FOR MEASURING ANALYTES 12/475,311 05/29/2009 10/22/2009 10/22/2009	LT00326 PRO 3	RAPID NUCLEIC ACID	61/205,626	01/22/2009
FOR MEASURING ANALYTES LT00326 PCT INTEGRATED SENSOR ARRAYS FOR BIOLOGICAL AND CHEMICAL ANALYSIS LT00327 PRO METHODS AND APPARATUS FOR DETECTING MOLECULAR INTERACTIONS USING FET ARRAYS 12/4/5,311 05/29/2009 PCT/US2009/005745 10/22/2009 61/133,204 06/26/2008	LT00326		12/474,897	05/29/2009
FOR BIOLOGICAL AND CHEMICAL ANALYSIS LT00327 PRO METHODS AND APPARATUS FOR DETECTING MOLECULAR INTERACTIONS USING FET ARRAYS PC 1/US 2009/005 /45 10/22/2009 61/133,204 06/26/2008	LT00326.1		12/475,311	05/29/2009
FOR DETECTING MOLECULAR INTERACTIONS USING FET ARRAYS 61/133,204 06/26/2008	LT00326 PCT	FOR BIOLOGICAL AND	PCT/US2009/005745	10/22/2009
LT00327.1 CIP METHODS AND APPARATUS 12/492,844 06/26/2009	LT00327 PRO	FOR DETECTING MOLECULAR INTERACTIONS USING FET	61/133,204	06/26/2008
	LT00327.1 CIP	METHODS AND APPARATUS	12/492,844	06/26/2009

	FOR DETECTING MOLECULAR		
	INTERACTIONS USING FET		
	ARRAYS		
LT00327 PCT	METHODS AND APPARATUS		
L100327 PC1		DCT/US2000/003707	04/24/2000
	FOR DETECTING MOLECULAR	PCT/US2009/003797	06/26/2009
	INTERACTIONS USING FET		
	ARRAYS		
LT00328 D	BOTTLE	29/325,007	09/24/2008
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LT00329 D	CONTAINER	29/325,009	09/24/2008
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LT00330 D	CIBBED THEOE	29/325,010	09/24/2008
	SIPPER TUBE	D595990	
LT00331 D	OTRAND OF THE	29/325,011	09/24/2008
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LT00332 GB	METHODS AND APPARATUS		
	FOR MEASURING ANALYTES	0811656.8	06/25/2008
	USING LARGE SCALE FET	00110000	00,23,2000
	ARRAYS		
LT00332 GB 2	METHODS AND APPARATUS		
E100332 GD 2	FOR MEASURING ANALYTES	0811657.6	06/25/2008
	USING LARGE SCALE FET	0611037.0	00/23/2006
	ARRAYS		
LT00332 PCT	METHODS AND APPARATUS		
L100332 PC1		DCT/10000/000/000	0.6/0.5/0.000
	FOR MEASURING ANALYTES	PCT/US2009/003766	06/25/2009
	USING LARGE SCALE FET		
	ARRAYS		
LT00333 PRO	METHOD FOR SEQUENCING		
	INDIVIDUAL CONCATENATED,	61/188,544	08/08/2008
	IMMOBILIZED DNA	01/100,511	00/00/2000
	MOLECULES UNDER TENSION		
LT00333 PRO 2	METHOD FOR SEQUENCING		
	INDIVIDUAL CONCATENATED,	61/191,930	09/12/2008
	IMMOBILIZED DNA	01/191,930	09/12/2006
	MOLECULES UNDER TENSION		
LT00333 PRO 4	METHOD FOR SEQUENCING		
	INDIVIDUAL CONCATENATED,	(1/104.400	00/07/0000
	IMMOBILIZED DNA	61/194,422	09/26/2008
	MOLECULES UNDER TENSION		
LT00333 PRO 4	METHOD FOR SEQUENCING		
	INDIVIDUAL NUCLEIC ACIDS	61/197,588	10/29/2008
	UNDER TENSION	027.27.19000	20,25,200
LT00333	METHOD FOR SEQUENCING		
2100333	INDIVIDUAL CONCATENATED,	12/319,140	12/31/2008
	IMMOBILIZED NUCLEIC ACIDS	12/319,170	12/31/2000
	UNDER TENSION		
	UNDER TENSION		

LT00333 PCT	METHODS FOR SEQUENCING	PCT/US2009/004546	08/07/2009
	INDIVIDUAL NUCLEIC ACIDS	1 01/032009/004340	00/07/2007
7.T000224.DDO	UNDER TENSION		
LT000334 PRO	METHODS AND APPARATUS	(1/252.27(10/16/2000
	FOR MAKING MONODISPERSE	61/252,276	10/16/2009
I TOO 225 DD O	POLYMER PARTICLES		
LT00335 PRO	BUFFERLESS PROTEINS FOR	61/308,863	02/26/2010
LTO0226 DD O	PH-BASED DNA SEQUENCING FLUIDICS SYSTEM FOR		
LT00336 PRO		(1/201 (27	10/21/2000
	SEQUENTIAL DELIVERY OF	61/291,627	12/31/2009
1 T00226 1 CID	REAGENTS		
LT00336.1 CIP	FLUIDICS SYSTEM FOR	10/585 665	05/04/0010
	SEQUENTIAL DELIVERY OF	12/785,667	05/24/2010
F.000022 C.D.000	REAGENTS		
LT00336 PCT	FLUIDICS SYSTEM FOR	DCT/FIG2010/001547	5/27/2010
	SEQUENTIAL DELIVERY OF	PCT/US2010/001547	5/27/2010
T TOO 227 DD O	REAGENTS		
LT00337PRO	SCAFFOLDED NUCLEIC ACID		
	POLYMER PARTICLES AND	61/263,734	11/23/2009
	METHODS OF MAKING AND	,	
1 T00227 DD () 2	USING SCAFFOLDED NUCLEIC ACID		
LT00337 PRO 2			
	POLYMER PARTICLES AND	61/291,788	12/31/2009
	METHODS OF MAKING AND USING		
LT00337 PRO 3	SCAFFOLDED NUCLEIC ACID		
L10033/1KO 3	POLYMER PARTICLES AND		
	METHODS OF MAKING AND	61/297,203	01/21/2010
	USING		
LT00337.1 CIP	SCAFFOLDED NUCLEIC ACID		
L100337.1 CH	POLYMER PARTICLES AND		05/24/2010
	METHODS OF MAKING AND	12/785,685	03/2 1/2010
	USING		
LT00337 PCT	SCAFFOLDED NUCLEIC ACID		
	POLYMER PARTICLES AND		
	METHODS OF MAKING AND	PCT/US2010/001549	5/27/2010
	USING		
	METHODS AND APPARATUS	61/040.060	0014412000
LT00338 PRO	FOR MEASURING ANALYTES	61/242,369	09/14/2009
LT00338 PCT	METHODS AND APPARATUS	DCT 3 (010/01 5 42	05/07/0010
	FOR MEASURING ANALYTES	PCT/US10/01543	05/27/2010
LT00339 PRO	METHOD OF MAKING SOLID	61/064 040	11/20/2000
	PHASE AMPLICONS	61/264,949	11/30/2009
LT00340 PRO	FLUIDICS INTERFACE SYSTEM	61/293,048	01/07/2010
LT00340 PRO 2	FLUIDICS INTERFACE SYSTEM	61/374,602	08/17/2010
LT00341 PRO			

	FOR PERFORMING		
	ELECTROCHEMICAL		
	REACTIONS		
LT00341.1 CIP	APPARATUS AND METHODS		
DIOUS II.I CH	FOR PERFORMING		
	ELECTROCHEMICAL	12/785,716	05/24/2010
	REACTIONS		
LT00341 PCT	APPARATUS AND METHODS		
2100341101	FOR PERFORMING		
	ELECTROCHEMICAL	PCT/US10/01553	05/27/2010
	REACTIONS		
LT00342 PRO	ENRICHED POPULATIONS OF		
121003421RO	SOLID PHASE AMPLICONS	61/380,705	09/07/2010
LT00343 PRO	BUFFERLESS PROTEINS FOR pH		
L100545 FRO	BALANCED DNA SEQUENCING	61/320,308	04/01/2010
LT00344 PRO	IMMOBILIZED BUFFER		
L100344 FKO	PARTICLES AND USES	61/359,790	06/29/2010
	THEREOF	01/339,/90	00/29/2010
LT00345 PRO	SOLID PHASE AMPLICONS		
L100343 FRO	USING ISOTHERMAL	61/361,072	07/02/2010
	AMPLIFICATION	01/301,0/2	0//02/2010
LT00346 PRO	ALTERNATIVE NUCLEOTIDE		
L100340 PRO		(1/254.172	06/11/2010
	FLOWS IN SEQUENCING-BY-	61/354,173	06/11/2010
1.T00340.DD0	SYNTHESIS METHODS		
LT00348 PRO	IMPROVEMENTS IN	61/360,493	06/30/2010
	CHEMICALLY-SENSITIVE	,	
1 maag 40 pp 0 g	TRANSISTOR ARRAYS		
LT00348 PRO 2	METHOD AND APPARATUS FOR	61/360,495	07/01/2010
X 510 7 10 110 0	TESTING ISFET ARRAYS	·	
LT0349 PRO	CHARGE COUPLED SENSOR	61/361,403	07/03/2010
LT00353 PCT	METHOD AND APPARATUS FOR	PCT/US10/48835	09/15/2010
	MEASURING ANALYTES	1.01/0010/10033	0911312010
LT00354 PRO	PIXEL DESIGN AND SENSOR	61/365,327	07/19/2010
	ARCHITECTURE	03/303,32/	0//12//2010