PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARK A. HAYES	09/06/2011

RECEIVING PARTY DATA

Name:	ARIZONA BOARD OF REGENTS
Street Address:	P. O. BOX 87511
City:	TEMPE
State/Country:	ARIZONA
Postal Code:	85287-3511

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13913433

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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Email: LifetechDocket@system.foundationip.com **Correspondent Name:** LIFE TECHNOLOGIES CORPORATION

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Address Line 4: CARLSBAD, CALIFORNIA 92008

ATTORNEY DOCKET NUMBER:	LT00853.1 DIV
NAME OF SUBMITTER:	MILA T. KASAN
SIGNATURE:	/Mila T. Kasan/
DATE SIGNED:	07/13/2016

Total Attachments: 7

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ASSIGNMENT

WHEREAS We, the below named inventors,

Peter Williams, Thomas J. Taylor, Daniel J.B. Williams, Ian Gould, Mark A. Hayes

hereinafter referred to as "Assignor(s)" have made an invention(s) set forth in an applications for patent of the United States, entitled:

METHOD OF DETERMINING THE NUCLEOTIDE SEQUNECE OF OLIGONUCLEOTIDES AND DNA MOLECULES

for which we filed a U.S. Nonprovisional patent application on May 3, 2011 which bears U.S. Patent Application Serial No. 13/099,718 and is a continuation of Serial No. 12/969,872 filed December 16, 2010, which is a continuation of Serial No. 11/929,141 filed October 30, 2007 now Patent No. 7,875,440, which is a continuation of Serial No. 10/709,436 filed May 5, 2004 now Patent No. 7,645,596, which is a continuation of Serial No. 09/941,882 filed Aug. 28, 2001 now Patent No. 6,780,591, which is a continuation-in-part of Serial No. 09/673,544 filed Feb. 26, 2001 and now abandoned, which is a continuation-in-part of PCT/US99/09616 filed Apr. 30, 1999 and claims the benefit of provisional application Serial No. 60/083,840 filed May 1, 1998; and

WHEREAS, ARIZONA BOARD OF REGENTS, whose post office address is P.O. Box 87511, Tempe, Arizona 85287-3511 (the "Assignee"), is desirous of acquiring the entire right, title, and interest in: the Inventions; the applications for patent identified above; the right to file applications for patent of the United States or other countries on the Inventions; any application for patent of the United States or other countries claiming priority to these applications; any provisional or other right to recover damages, including royalties, for prior infringements of these applications; and any patent of the United States or other countries that may be granted therefor or thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

- (a) the Invention(s);
- (b) the application for patent identified above;
- (c) the right to file applications for patent of the United States or other countries on the Invention(s), including all rights under the Paris Convention for the Protection of Industrial Property and under the Patent Cooperation Treaty;

- (d) any application(s) for patent of the United States or other countries claiming the Invention(s);
- (e) any application(s) for patent of the United States or other countries claiming priority to the application for patent identified above or any application(s) for patent claiming the Invention(s), including any division(s), continuation(s), and continuation(s)-in-part; and
- (f) any provisional or other right to recover damages, including royalties, for prior infringements of any application for patent identified in the preceding paragraphs (b)-(e); and
- (g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b) (e), including any reissue(s) and extension(s) of said patent(s).

The above-granted rights, titles, and interests are to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

The Assignor hereby represents to the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, or if applicable, at such time said prior agreement was executed, the Assignor is a lawful owner of an undivided interest in the entire right, title, and interest in and to the Invention(s), that the Invention(s) are unencumbered, except, if applicable, by obligation to assign in accordance with said prior agreement, and that the Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth herein.

The Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that the Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done in connection with any and all proceedings for the procurement, maintenance, enforcement and defense of the Invention(s), said applications, and said patents, including interference proceedings, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

The Assignor hereby requests the Commissioner of Patents to issue said patents of the United States to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date:	By:
	Peter Williams
State of)	
County of)) ss.
On,	before me,, Notary
Public, personally appeared	, personally known
to me or proved to me on the basis	of satisfactory evidence, to be the person(s) whose name(s)
is/are subscribed to the within instru	iment and acknowledged to me that he/she/they executed the
same in his/her/their authorized ca	apacity(ies), and that by his/her/their signature(s) on the
instrument the person(s), or the enti-	tity upon behalf of which the person(s) acted, executed the
instrument.	
WITNESS my hand and official seal.	
Signature of Notary Public	Place Notary Seal Above
My Commission Expires:	

Date: By	y:
	Thomas J. Taylor
State of	
State of) , ss.	
County of)	
On, before me,	, Notary
Public, personally appeared	, personally known
to me or proved to me on the basis of satisfactory	evidence, to be the person(s) whose name(s)
is/are subscribed to the within instrument and ackn	nowledged to me that he/she/they executed the
same in his/her/their authorized capacity(ies), a	nd that by his/her/their signature(s) on the
instrument the person(s), or the entity upon behal	If of which the person(s) acted, executed the
instrument.	
WITNESS my hand and official seal.	
Signature of Notary Public	Place Notary Seal Above
	,
My Commission Expires:	-

Date:	_ By	y:
	•	Daniel J.B. Williams
State of		
County of)	S.	
county of		
On, be	fore me,	, Notary
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is/are subscribed to the within instrumen	nt and ackn	nowledged to me that he/she/they executed the
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instrument the person(s), or the entity	upon behal	If of which the person(s) acted, executed the
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WITNESS my hand and official seal.		
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Signature of Notary Public		Place Notary Seal Above
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My Commission Expires:		-

Date: By:	
•	Ian Gould
State of	
County of	
County of)	
On, before me,	, Notary
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to me or proved to me on the basis of satisfactory evide	ence, to be the person(s) whose name(s)
is/are subscribed to the within instrument and acknowled	dged to me that he/she/they executed the
same in his/her/their authorized capacity(ies), and the	at by his/her/their signature(s) on the
instrument the person(s), or the entity upon behalf of v	which the person(s) acted, executed the
instrument.	
WITNESS my hand and official seal.	
Signature of Notary Public	Place Notary Seal Above
	· ·
My Commission Expires:	

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Date: _ 1 - 6 - 10 //	By: Man 1
	Mark A. Hayes
State of AHIZONA	
County of MARI COPA) ss.	
On SEPTEMBER 6, 2011, before	me, KHERA DOUGLASS, Notary A. HAYES, personally known
Public, personally appeared	A. HAYES , personally known
to me or proved to me on the basis of satisfa	actory evidence, to be the person(s) whose name(s)
	acknowledged to me that he/she/they executed the
	s), and that by his/her/their signature(s) on the
	behalf of which the person(s) acted, executed the
instrument.	province, across, checking the
WITNESS my hand and official seal.	KHERA DOUGLASS Notary Public - Arizona Maricopa County My Commission Expires May 15, 2014
Signature of Notary Public	Place Notary Seal Above
My Commission Expires: 5/15/14	

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PATENT REEL: 039151 FRAME: 0331

RECORDED: 07/13/2016