

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3086169

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHRISTIAN KOLLER	10/16/2014
MARCIN SIKORA	10/29/2014
PETER VANDER HORN	10/16/2014
<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: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14506520
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<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>	
<b>Email:</b>	LifetechDocket@system.foundationip.com
<b>Correspondent Name:</b>	CHRISTIAN D'AVIGNON-AUBUT
<b>Address Line 1:</b>	5791 VAN ALLEN WAY
<b>Address Line 2:</b>	LIFE TECHNOLOGIES CORPORATION
<b>Address Line 4:</b>	CARLSBAD, CALIFORNIA 92008
<b>ATTORNEY DOCKET NUMBER:</b>	LT00861
<b>NAME OF SUBMITTER:</b>	ELIZABETH MORGAN
<b>SIGNATURE:</b>	/Elizabeth Morgan/
<b>DATE SIGNED:</b>	10/29/2014
<b>Total Attachments: 9</b>	
source=LT00861_Executed_Assignment#page1.tif	
source=LT00861_Executed_Assignment#page2.tif	
source=LT00861_Executed_Assignment#page3.tif	
source=LT00861_Executed_Assignment#page4.tif	
source=LT00861_Executed_Assignment#page5.tif	
<b>PATENT</b>	

source=LT00861\_Executed\_Assignment#page6.tif

source=LT00861\_Executed\_Assignment#page7.tif

source=LT00861\_Executed\_Assignment#page8.tif

source=LT00861\_Executed\_Assignment#page9.tif

**ASSIGNMENT**

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged, I/we:

1. Christian KOLLER, a citizen of **DE**; having a mailing address of  
Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, California 92008;  
and a resident of **San Francisco, CA.**

2. Marcin SIKORA, a citizen of **PL**; having a mailing address of  
1210 Bellevue Ave., #104, Burlingame, California 94010 ;  
and a resident of **Burlingame, CA.**

3. Peter VANDER HORN, a citizen of **US**; having a mailing address of  
Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, California 92008;  
and a resident of **Encinitas, CA.**

do hereby SELL, ASSIGN, AND TRANSFER to **LIFE TECHNOLOGIES CORPORATION**, (the “Assignee”, a corporation of the State of Delaware) having a place of business at 5791 Van Allen Way, Carlsbad, California 92008, USA the entire right, title, and interest for the United States and all foreign countries in and to

(1) any and all inventions, improvements, know-how, and other subject matter described, disclosed, or contained (whether claimed or not) in (a) United States Non-provisional Patent Application, Serial No. 14/506,520, filed on October 3, 2014 entitled METHODS AND SYSTEMS FOR MODELING PHASING EFFECTS IN SEQUENCING USING TERMINATION CHEMISTRY, (b) all divisional, continuing, design, utility model, substitute, renewal, reissue, reexamination, and all other applications for patent which have been or shall be filed in the United States and all foreign countries that claim priority to or through, any of the foregoing applications; and (c) all original, reissued and reexamined patents which have been or shall be issued in the United States or any foreign country on or resulting from any of the applications referenced in (a) or (b);

(2) any and all inventions, improvements, know-how, and other subject matter described, disclosed, or contained (whether claimed or not) in any of the foregoing applications and patents;

(3) the right to file foreign applications under the provisions of any convention or treaty and claim priority based on any of the foregoing applications in the United States or any other country; and

(4) the copyright in any and all material described, disclosed, or contained in the foregoing applications and patents;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned; and

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will (1) execute any and all papers and documents (including without limitation oaths, declarations, assignments, and powers of attorney) and perform any and all acts reasonably necessary in connection with the filing, prosecution, and issuance of each of the patent applications and patents referenced herein; (2) communicate to the Assignee all facts known to the undersigned relating to each of the patent applications, patents, and improvements referenced herein, and the history thereof; and (3) generally do everything possible that the Assignee shall reasonably consider desirable to vest title in Assignee in and to each of the patent applications, patents, and improvements referenced herein and for securing, maintaining, and enforcing proper patent protections for inventions, improvements, know-how, and other subject matter referenced herein.

ASSIGNOR(S) HEREBY AUTHORIZE AND REQUEST the assignee's agents associated with customer number 52059 to insert above the filing date and application number of said application when known.

TO BE BINDING on the heirs, assigns, representatives, and successors of the undersigned and extend to the successors, assigns, and nominees of the Assignee.

SEVERABILITY. If a provision of this Assignment is or becomes illegal, invalid, or unenforceable in any jurisdiction, that shall not affect (a) the validity or enforceability in that jurisdiction of any other provision of this Assignment, or (b) the validity or enforceability in other jurisdictions of that or any other provision of this Assignment.

Signature:   
Name (1) Christian KOLLER

Date: 16 October 2014

Signature: \_\_\_\_\_  
Name (2) Marcin SIKORA

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Name (3) Peter VANDER HORN

Date: \_\_\_\_\_

**ASSIGNMENT**

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged, I/we:

1. Christian KOLLER, a citizen of DE; having a mailing address of  
Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, California 92008;  
and a resident of San Francisco, CA.

2. Marcin SIKORA, a citizen of PL; having a mailing address of  
1210 Bellevue Ave., #104, Burlingame, California 94010 ;  
and a resident of Burlingame, CA.

3. Peter VANDER HORN, a citizen of US; having a mailing address of  
Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, California 92008;  
and a resident of Encinitas, CA.

do hereby SELL, ASSIGN, AND TRANSFER to LIFE TECHNOLOGIES CORPORATION, (the "Assignee", a corporation of the State of Delaware) having a place of business at 5791 Van Allen Way, Carlsbad, California 92008, USA the entire right, title, and interest for the United States and all foreign countries in and to

(1) any and all inventions, improvements, know-how, and other subject matter described, disclosed, or contained (whether claimed or not) in (a) United States Non-provisional Patent Application, Serial No. 14/506,520, filed on October 3, 2014 entitled METHODS AND SYSTEMS FOR MODELING PHASING EFFECTS IN SEQUENCING USING TERMINATION CHEMISTRY, (b) all divisional, continuing, design, utility model, substitute, renewal, reissue, reexamination, and all other applications for patent which have been or shall be filed in the United States and all foreign countries that claim priority to or through, any of the foregoing applications; and (c) all original, reissued and reexamined patents which have been or shall be issued in the United States or any foreign country on or resulting from any of the applications referenced in (a) or (b);

(2) any and all inventions, improvements, know-how, and other subject matter described, disclosed, or contained (whether claimed or not) in any of the foregoing applications and patents;

(3) the right to file foreign applications under the provisions of any convention or treaty and claim priority based on any of the foregoing applications in the United States or any other country; and

(4) the copyright in any and all material described, disclosed, or contained in the foregoing applications and patents;

**AUTHORIZE AND REQUEST** the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

**WARRANT AND COVENANT** that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned; and

**COVENANT**, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will (1) execute any and all papers and documents (including without limitation oaths, declarations, assignments, and powers of attorney) and perform any and all acts reasonably necessary in connection with the filing, prosecution, and issuance of each of the patent applications and patents referenced herein; (2) communicate to the Assignee all facts known to the undersigned relating to each of the patent applications, patents, and improvements referenced herein, and the history thereof; and (3) generally do everything possible that the Assignee shall reasonably consider desirable to vest title in Assignee in and to each of the patent applications, patents, and improvements referenced herein and for securing, maintaining, and enforcing proper patent protections for inventions, improvements, know-how, and other subject matter referenced herein.

**ASSIGNOR(S) HEREBY AUTHORIZE AND REQUEST** the assignee's agents associated with customer number 52059 to insert above the filing date and application number of said application when known.

**TO BE BINDING** on the heirs, assigns, representatives, and successors of the undersigned and extend to the successors, assigns, and nominees of the Assignee.

SEVERABILITY. If a provision of this Assignment is or becomes illegal, invalid, or unenforceable in any jurisdiction, that shall not affect (a) the validity or enforceability in that jurisdiction of any other provision of this Assignment, or (b) the validity or enforceability in other jurisdictions of that or any other provision of this Assignment.

Signature: \_\_\_\_\_  
Name (1) Christian KOLLER

Date: \_\_\_\_\_

Signature:  \_\_\_\_\_  
Name (2) Marcin SIKORA

Date: 10/29/2014

Signature: \_\_\_\_\_  
Name (3) Peter VANDER HORN

Date: \_\_\_\_\_



ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged, I/we:

1. Christian KOLLER, a citizen of **DE**; having a mailing address of  
Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, California 92008;

and a resident of **San Francisco, CA**.

2. Marcin SIKORA, a citizen of **PL**; having a mailing address of  
1210 Bellevue Ave., #104, Burlingame, California 94010 ;

and a resident of **Burlingame, CA**.

3. Peter VANDER HORN, a citizen of **US**; having a mailing address of  
Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, California 92008;

and a resident of **Encinitas, CA**.

do hereby SELL, ASSIGN, AND TRANSFER to **LIFE TECHNOLOGIES CORPORATION**, (the "Assignee", a corporation of the State of Delaware) having a place of business at 5791 Van Allen Way, Carlsbad, California 92008, USA the entire right, title, and interest for the United States and all foreign countries in and to

(1) any and all inventions, improvements, know-how, and other subject matter described, disclosed, or contained (whether claimed or not) in (a) United States Non-provisional Patent Application, Serial No. 14/506,520, filed on October 3, 2014 entitled METHODS AND SYSTEMS FOR MODELING PHASING EFFECTS IN SEQUENCING USING TERMINATION CHEMISTRY, (b) all divisional, continuing, design, utility model, substitute, renewal, reissue, reexamination, and all other applications for patent which have been or shall be filed in the United States and all foreign countries that claim priority to or through, any of the foregoing applications; and (c) all original, reissued and reexamined patents which have been or shall be issued in the United States or any foreign country on or resulting from any of the applications referenced in (a) or (b);

(2) any and all inventions, improvements, know-how, and other subject matter described, disclosed, or contained (whether claimed or not) in any of the foregoing applications and patents;

(3) the right to file foreign applications under the provisions of any convention or treaty and claim priority based on any of the foregoing applications in the United States or any other country; and

(4) the copyright in any and all material described, disclosed, or contained in the foregoing applications and patents;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned; and

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will (1) execute any and all papers and documents (including without limitation oaths, declarations, assignments, and powers of attorney) and perform any and all acts reasonably necessary in connection with the filing, prosecution, and issuance of each of the patent applications and patents referenced herein; (2) communicate to the Assignee all facts known to the undersigned relating to each of the patent applications, patents, and improvements referenced herein, and the history thereof; and (3) generally do everything possible that the Assignee shall reasonably consider desirable to vest title in Assignee in and to each of the patent applications, patents, and improvements referenced herein and for securing, maintaining, and enforcing proper patent protections for inventions, improvements, know-how, and other subject matter referenced herein.

ASSIGNOR(S) HEREBY AUTHORIZE AND REQUEST the assignee's agents associated with customer number 52059 to insert above the filing date and application number of said application when known.

TO BE BINDING on the heirs, assigns, representatives, and successors of the undersigned and extend to the successors, assigns, and nominees of the Assignee.

SEVERABILITY. If a provision of this Assignment is or becomes illegal, invalid, or unenforceable in any jurisdiction, that shall not affect (a) the validity or enforceability in that jurisdiction of any other provision of this Assignment, or (b) the validity or enforceability in other jurisdictions of that or any other provision of this Assignment.

Signature: \_\_\_\_\_  
Name (1) Christian KOLLER

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Name (2) Marcin SIKORA

Date: \_\_\_\_\_

Signature:  \_\_\_\_\_  
Name (3) Peter VANDER HORN

Date: 10/16/14