503206656 03/05/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3253271

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DOUGLAS T. YAMANISHI	09/30/2013
GEORGE WALKER	09/30/2013
GUOLIANG TAO	09/30/2013
LEI WU	10/01/2013
XIAOBO WANG	09/30/2013
JOE OUYANG	10/02/2013
JIA XU	09/30/2013

RECEIVING PARTY DATA

Name:	AVIVA BIOSCIENCES CORPORATION
Street Address:	6330 NANCY RIDGE DRIVE, SUITE 103
City:	SAN DIEGO
State/Country:	CALIFORNIA
Postal Code:	92121

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14636032

CORRESPONDENCE DATA

Fax Number: (858)720-5125

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: 8587207912
Email: jjung@mofo.com

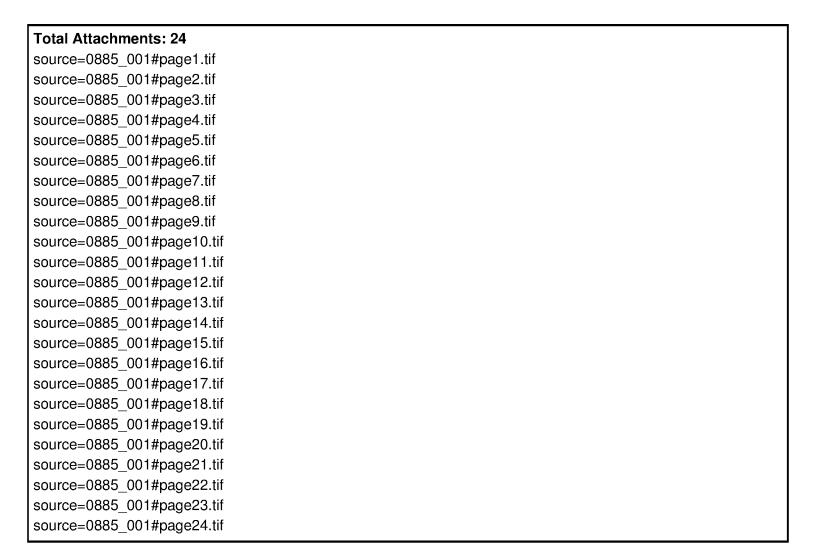
Correspondent Name: MORRISON & FOERSTER LLP

Address Line 1: 12531 HIGH BLUFF DRIVE, SUITE 100

Address Line 4: SAN DIEGO, CALIFORNIA 92130

ATTORNEY DOCKET NUMBER:	471842001101
NAME OF SUBMITTER:	BU YIN
SIGNATURE:	/Bu Yin/
DATE SIGNED:	03/05/2015

PATENT REEL: 035097 FRAME: 0282



PATENT REEL: 035097 FRAME: 0283

ASSIGNMENT

This assignment is by:

- Ping LIN
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Douglas T. YAMANISHI
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- George WALKER
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Junquan XU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Mingxian HUANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Guoliang TAO
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Lei WU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Xiaobo WANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Joe OUYANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- 10. Jing CHENG6330 Nancy Ridge Drive, Suite 103San Diego, California 92121
- 11. Jia XU6330 Nancy Ridge Drive, Suite 103San Diego, California 92121

(referred to in this Assignment as "Assignors"), who reside at or have a mailing address as listed above.

This Assignment is to:

Assignee: AVIVA BIOSCIENCES CORPORATION

Address: 6330 Nancy Ridge Drive, Suite 103, San Diego, California 92121 A corporation duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), who desire to acquire the entire right, title and interest in said inventions and said application for letters patent of the United States, and in any United States or foreign, letters patent or patents, to be obtained therefor and thereon.

Assignors have invented certain new and useful inventions in:

METHODS AND COMPOSITIONS FOR DETECTING NON-HEMATOPOIETIC CELLS FROM A BLOOD SAMPLE

for which the following application has been filed in the United States of America.

Serial No.: 14/027,044

Filing Date: September 13, 2013

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignors hereby sell, assign, transfer and set over, to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application 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 therefor and thereon, and in and to any and all provisionals, divisions, continuations, continuations-in-part and substitutions of said application, or reissues, re-examinations or extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.
- 2. Assignors represent, warrant and covenant that, at the time of execution and delivery of this agreement, Assignors are the sole and lawful owners of the entire right, title and interest in and to said inventions and said application for letters patent, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement.
- 3. Assignors shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said application for letters patent; (b) letters patent for said inventions in any country, including any reissue, re-examination or extension of or interference proceedings; or (c) any provisional, division, continuation, continuation-in-part, or substitutions of any application for letters patent or any reissues, re-examinations, extensions or interference proceedings involving any letters patent, to be obtained thereon. To be clear, for purposes of this paragraph, "desirable" shall include, without limitation, any act necessary or useful in connection with United States laws and/or international conventions.
- 4. Assignors hereby authorize and request the Commissioner of Patents in the United States to issue the above mentioned letters patents of the United States to Assignee as the assignee of said inventions and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

5. "I hereby grant Assignee's attorneys, all of Morrison & Foerster LLP, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark office for recordation of this document, including the power to insert on this assignment the application number and filing date of said application when known."

In witness whereby, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date: Signature: Ping Lin Date: O9 / 3 0 / 3 Signature: Daylar Jananishi Date: Signature: George Walker Date: Signature: Junquan Xu Date: Signature: Mingxian Huang Date: Signature: Guoliang Tao Date: Signature: Lei Wu Date: Signature: Joe Ouyang	Date:			Signature:	
Date: Signature: George Walker Date: Signature: Junquan Xu Date: Signature: Mingxian Huang Date: Signature: Guoliang Tao Date: Signature: Lei Wu Date: Signature: Xiaobo Wang					Ping Lin
Date: Signature: George Walker Date: Signature: Junquan Xu Date: Signature: Mingxian Huang Date: Signature: Guoliang Tao Date: Signature: Lei Wu Date: Signature: Xiaobo Wang					
Date: Signature: George Walker Date: Signature: Junquan Xu Date: Signature: Mingxian Huang Date: Signature: Guoliang Tao Date: Signature: Lei Wu Date: Signature: Xiaobo Wang					M of
Date: Signature: George Walker Date: Signature: Junquan Xu Date: Signature: Mingxian Huang Date: Signature: Guoliang Tao Date: Signature: Lei Wu Date: Signature: Xiaobo Wang	Date:	09/30/13		Signature:	Dayle primary
Date: Signature: Junquan Xu Date: Mingxian Huang Date: Guoliang Tao Date: Signature: Lei Wu Date: Signature: Xiaobo Wang Date: Signature: Signature: Xiaobo Wang					Douglas T. Yamanishi
Date: Signature: Junquan Xu Date: Mingxian Huang Date: Guoliang Tao Date: Signature: Lei Wu Date: Signature: Xiaobo Wang Date: Signature: Signature: Xiaobo Wang				. * *	
Date: Signature: Junquan Xu Date: Mingxian Huang Date: Guoliang Tao Date: Signature: Lei Wu Date: Signature: Xiaobo Wang Date: Signature: Signature: Xiaobo Wang					
Date: Signature: Junquan Xu Date: Mingxian Huang Date: Guoliang Tao Date: Signature: Lei Wu Date: Signature: Xiaobo Wang Date: Signature: Signature: Xiaobo Wang	Date:			Signature:	C W-11
Date: Signature: Mingxian Huang Date: Signature: Guoliang Tao Date: Lei Wu Date: Signature: Xiaobo Wang Date: Signature: Signature:		en e			George walker
Date: Signature: Mingxian Huang Date: Signature: Guoliang Tao Date: Lei Wu Date: Signature: Xiaobo Wang Date: Signature: Signature:					
Date: Signature: Mingxian Huang Date: Signature: Guoliang Tao Date: Lei Wu Date: Signature: Xiaobo Wang Date: Signature: Signature:	V~ .				
Date: Signature: Mingxian Huang Date: Signature: Guoliang Tao Date: Lei Wu Date: Signature: Xiaobo Wang Date: Signature: Signature:	Date:			Signature:	Linguian Vi
Date: Signature: Guoliang Tao Date: Lei Wu Date: Xiaobo Wang Date: Signature: Xiaobo Wang					Junquan Au
Date: Signature: Guoliang Tao Date: Lei Wu Date: Xiaobo Wang Date: Signature: Xiaobo Wang					
Date: Signature: Guoliang Tao Date: Lei Wu Date: Xiaobo Wang Date: Signature: Xiaobo Wang	Data			O!	
Date: Signature: Guoliang Tao Date: Lei Wu Date: Xiaobo Wang Date: Signature: Xiaobo Wang	Date:	and the second of the second o		Signature:	Mingxian Huang
Date: Signature: Lei Wu Date: Signature: Xiaobo Wang Date: Signature:					The state of the s
Date: Signature: Lei Wu Date: Signature: Xiaobo Wang Date: Signature:					
Date: Signature: Lei Wu Date: Signature: Xiaobo Wang Date: Signature:	Date:			Signature	
Date: Signature: Lei Wu Date: Signature: Xiaobo Wang Date: Signature:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Chapter Algrey Control of Chapter on Chapter on Chapter of Chapter		m.S.m.m.	Guoliang Tao
Date: Signature: Xiaobo Wang Date: Signature:					
Date: Signature: Xiaobo Wang Date: Signature:			;		
Date: Signature: Xiaobo Wang Date: Signature:	Date:			Signature:	
Date: Signature: Xiaobo Wang Date: Signature:					Lei Wu
Date: Signature:					
Date: Signature:					
Date: Signature:	Date:			Signature:	
Date: Signature: Joe Ouyang					Xiaobo Wang
Date: Signature: Joe Ouyang					
Date: Signature: Joe Ouyang					
Joe Ouyang	Date:			Signature:	1
					Joe Ouyang

3 of 4

sd-626512

Date:	Signature:	1
Duto.	Jing Cheng	+ 1
•		1 .

Date: 9/30/13

Signature:

4 of 4

sd-626512

ASSIGNMENT

This assignment is by:

- Ping LIN
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Douglas T. YAMANISHI
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- George WALKER
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Junquan XU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Mingxian HUANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Guoliang TAO
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Lei WU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Xiaobo WANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Joe OUYANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- 10. Jing CHENG6330 Nancy Ridge Drive, Suite 103San Diego, California 92121
- 11. Jia XU6330 Nancy Ridge Drive, Suite 103San Diego, California 92121

(referred to in this Assignment as "Assignors"), who reside at or have a mailing address as listed above.

This Assignment is to:

Assignee: AVIVA BIOSCIENCES CORPORATION

Address: 6330 Nancy Ridge Drive, Suite 103, San Diego, California 92121 A corporation duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), who desire to acquire the entire right, title and interest in said inventions and said application for letters patent of the United States, and in any United States or foreign, letters patent or patents, to be obtained therefor and thereon.

Assignors have invented certain new and useful inventions in:

METHODS AND COMPOSITIONS FOR DETECTING NON-HEMATOPOIETIC CELLS FROM A BLOOD SAMPLE

for which the following application has been filed in the United States of America.

Serial No.: 14/027,044

Filing Date: September 13, 2013

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignors hereby sell, assign, transfer and set over, to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application 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 therefor and thereon, and in and to any and all provisionals, divisions, continuations, continuations-in-part and substitutions of said application, or reissues, re-examinations or extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.
- 2. Assignors represent, warrant and covenant that, at the time of execution and delivery of this agreement, Assignors are the sole and lawful owners of the entire right, title and interest in and to said inventions and said application for letters patent, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement.
- 3. Assignors shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said application for letters patent; (b) letters patent for said inventions in any country, including any reissue, re-examination or extension of or interference proceedings; or (c) any provisional, division, continuation, continuation-in-part, or substitutions of any application for letters patent or any reissues, re-examinations, extensions or interference proceedings involving any letters patent, to be obtained thereon. To be clear, for purposes of this paragraph, "desirable" shall include, without limitation, any act necessary or useful in connection with United States laws and/or international conventions.
- 4. Assignors hereby authorize and request the Commissioner of Patents in the United States to issue the above mentioned letters patents of the United States to Assignee as the assignee of said inventions and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

5. "I hereby grant Assignee's attorneys, all of Morrison & Foerster LLP, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark office for recordation of this document, including the power to insert on this assignment the application number and filing date of said application when known."

In witness whereby, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date:		Signature:	Ping Lin
Date:		Signature:	Douglas T. Yamanishi
Date:	9/30/13	Signature:	George Walker
Date:		Signature:	Junquan Xu
Date:		Signature:	Mingxian Huang
Date:		Signature:	Guoliang Tao
Date:		Signature:	Lei Wu
Date: _		Signature:	Xiaobo Wang
Date:			Joe Ouyang
		3 of 4	

sd-626512

Date: Signature: Jing Cheng

Date: <u>9/30/13</u> Signature:

Jia X/u

4 of 4

sd-626512

ASSIGNMENT

This assignment is by:

- Ping LIN
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Douglas T. YAMANISHI
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- George WALKER
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Junquan XU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Mingxian HUANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Guoliang TAO
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Lei WU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Xiaobo WANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Joe OUYANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- 10. Jing CHENG6330 Nancy Ridge Drive, Suite 103San Diego, California 92121
- 11. Jia XU6330 Nancy Ridge Drive, Suite 103San Diego, California 92121

(referred to in this Assignment as "Assignors"), who reside at or have a mailing address as listed above.

This Assignment is to:

Assignee: AVIVA BIOSCIENCES CORPORATION

Address: 6330 Nancy Ridge Drive, Suite 103, San Diego, California 92121 A corporation duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), who desire to acquire the entire right, title and interest in said inventions and said application for letters patent of the United States, and in any United States or foreign, letters patent or patents, to be obtained therefor and thereon.

Assignors have invented certain new and useful inventions in:

METHODS AND COMPOSITIONS FOR DETECTING NON-HEMATOPOIETIC CELLS FROM A BLOOD SAMPLE

for which the following application has been filed in the United States of America.

Serial No.: 14/027,044

Filing Date: September 13, 2013

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- Assignors hereby sell, assign, transfer and set over, to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application 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 therefor and thereon, and in and to any and all provisionals, divisions, continuations, continuations-in-part and substitutions of said application, or reissues, re-examinations or extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.
- Assignors represent, warrant and covenant that, at the time of execution and delivery of this agreement, Assignors are the sole and lawful owners of the entire right, title and interest in and to said inventions and said application for letters patent, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement.
- Assignors shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said application for letters patent; (b) letters patent for said inventions in any country, including any reissue, re-examination or extension of or interference proceedings; or (c) any provisional, division, continuation, continuation-in-part, or substitutions of any application for letters patent or any reissues, re-examinations, extensions or interference proceedings involving any letters patent, to be obtained thereon. To be clear, for purposes of this paragraph, "desirable" shall include, without limitation, any act necessary or useful in connection with United States laws and/or international conventions.
- Assignors hereby authorize and request the Commissioner of Patents in the United States to issue the above mentioned letters patents of the United States to Assignee as the assignee of said inventions and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

5. "I hereby grant Assignee's attorneys, all of Morrison & Foerster LLP, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark office for recordation of this document, including the power to insert on this assignment the application number and filing date of said application when known."

In witness whereby, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date:		Signature:	Ping Lin
Date:		Signature:	Douglas T. Yamanishi
Date:	Andreas Man Andreas Company of the C	Signature:	George Walker
Date:		Signature:	Junquan Xu
Date:		Signature:	Mingxian Huang
Date:	09/30/13	Signature:	Guoliang Tao
Date:		Signature:	Lei Wu
Date:		Signature:	Xiaobo Wang
Date:		Signature:	Joe Ouyang

Date:		Signature:	Jing Cheng	.:
•		•		,
Date: _	9/30/13	Signature:		

4 of 4

sd-626512

ASSIGNMENT

This assignment is by:

- Ping LIN
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Douglas T. YAMANISHI
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- George WALKER
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Junquan XU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Mingxian HUANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Guoliang TAO
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Lei WU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Xiaobo WANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Joe OUYANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- 10. Jing CHENG6330 Nancy Ridge Drive, Suite 103San Diego, California 92121
- 11. Jia XU6330 Nancy Ridge Drive, Suite 103San Diego, California 92121

(referred to in this Assignment as "Assignors"), who reside at or have a mailing address as listed above.

This Assignment is to:

Assignee: AVIVA BIOSCIENCES CORPORATION

Address: 6330 Nancy Ridge Drive, Suite 103, San Diego, California 92121 A corporation duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), who desire to acquire the entire right, title and interest in said inventions and said application for letters patent of the United States, and in any United States or foreign, letters patent or patents, to be obtained therefor and thereon.

Assignors have invented certain new and useful inventions in:

METHODS AND COMPOSITIONS FOR DETECTING NON-HEMATOPOIETIC CELLS FROM A BLOOD SAMPLE

for which the following application has been filed in the United States of America.

Serial No.: 14/027,044

Filing Date: September 13, 2013

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignors hereby sell, assign, transfer and set over, to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application 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 therefor and thereon, and in and to any and all provisionals, divisions, continuations, continuations-in-part and substitutions of said application, or reissues, re-examinations or extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.
- 2. Assignors represent, warrant and covenant that, at the time of execution and delivery of this agreement, Assignors are the sole and lawful owners of the entire right, title and interest in and to said inventions and said application for letters patent, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement.
- Assignors shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said application for letters patent; (b) letters patent for said inventions in any country, including any reissue, re-examination or extension of or interference proceedings; or (c) any provisional, division, continuation, continuation-in-part, or substitutions of any application for letters patent or any reissues, re-examinations, extensions or interference proceedings involving any letters patent, to be obtained thereon. To be clear, for purposes of this paragraph, "desirable" shall include, without limitation, any act necessary or useful in connection with United States laws and/or international conventions.
- 4. Assignors hereby authorize and request the Commissioner of Patents in the United States to issue the above mentioned letters patents of the United States to Assignee as the assignee of said inventions and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

5. "I hereby grant Assignee's attorneys, all of Morrison & Foerster LLP, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark office for recordation of this document, including the power to insert on this assignment the application number and filing date of said application when known."

In witness whereby, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date:	Signature:	Ping Lin
Date:	Signature:	Douglas T. Yamanishi
Date:	Signature:	George Walker
Date:	Signature:	Junquan Xu
Date:	Signature:	Mingxian Huang
Date:	Signature:	Guoliang Tao
Date: 10/1/15	Signature	Lei Wu
Date:	Signature:	Xiaobo Wang
Date:	Signature:	Joe Ouyang

Date: Signature: Jing Cheng

Signature:

Jia Xu

0/-1/2

4 of 4

sd-626512

ASSIGNMENT

This assignment is by:

- Ping LIN
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Douglas T. YAMANISHI
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- George WALKER
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Junquan XU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Mingxian HUANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Guoliang TAO
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Lei WU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Xiaobo WANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Joe OUYANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- 10. Jing CHENG6330 Nancy Ridge Drive, Suite 103San Diego, California 92121
- 11. Jia XU6330 Nancy Ridge Drive, Suite 103San Diego, California 92121

(referred to in this Assignment as "Assignors"), who reside at or have a mailing address as listed above.

This Assignment is to:

Assignee: AVIVA BIOSCIENCES CORPORATION

Address: 6330 Nancy Ridge Drive, Suite 103, San Diego, California 92121 A corporation duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), who desire to acquire the entire right, title and interest in said inventions and said application for letters patent of the United States, and in any United States or foreign, letters patent or patents, to be obtained therefor and thereon.

Assignors have invented certain new and useful inventions in:

METHODS AND COMPOSITIONS FOR DETECTING NON-HEMATOPOIETIC CELLS FROM A BLOOD SAMPLE

for which the following application has been filed in the United States of America.

Serial No.: 14/027,044

Filing Date: September 13, 2013

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignors hereby sell, assign, transfer and set over, to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application 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 therefor and thereon, and in and to any and all provisionals, divisions, continuations, continuations-in-part and substitutions of said application, or reissues, re-examinations or extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.
- 2. Assignors represent, warrant and covenant that, at the time of execution and delivery of this agreement, Assignors are the sole and lawful owners of the entire right, title and interest in and to said inventions and said application for letters patent, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement.
- 3. Assignors shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said application for letters patent; (b) letters patent for said inventions in any country, including any reissue, re-examination or extension of or interference proceedings; or (c) any provisional, division, continuation, continuation-in-part, or substitutions of any application for letters patent or any reissues, re-examinations, extensions or interference proceedings involving any letters patent, to be obtained thereon. To be clear, for purposes of this paragraph, "desirable" shall include, without limitation, any act necessary or useful in connection with United States laws and/or international conventions.
- 4. Assignors hereby authorize and request the Commissioner of Patents in the United States to issue the above mentioned letters patents of the United States to Assignee as the assignee of said inventions and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

In witness whereby, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date:		Signature:	Ping Lin
Date:	And desired a second se		Douglas T. Yamanishi
Date:	official feet and the second s	Signature:	George Walker
Date:		Signature;	Junquan Xu
Date:		Signature:	Mingxian Huang
Date:	,	Signature:	Guoliang Tao
Date: _	Management of the second of th	Signature:	Lei Wu
Date: _	09/30/2013	Signature:	X:~bo we f
Date:		Signature:	Joe Ouyang

4 of 4

sd-626512

ASSIGNMENT

This assignment is by:

- Ping LIN
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Douglas T. YAMANISHI
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- George WALKER
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Junquan XU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Mingxian HUANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Guoliang TAO
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Lei WU
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Xiaobo WANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- Joe OUYANG
 6330 Nancy Ridge Drive, Suite 103
 San Diego, California 92121
- 10. Jing CHENG6330 Nancy Ridge Drive, Suite 103San Diego, California 92121
- 11. Jia XU6330 Nancy Ridge Drive, Suite 103San Diego, California 92121

(referred to in this Assignment as "Assignors"), who reside at or have a mailing address as listed above.

This Assignment is to:

Assignee: AVIVA BIOSCIENCES CORPORATION

Address: 6330 Nancy Ridge Drive, Suite 103, San Diego, California 92121 A corporation duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), who desire to acquire the entire right, title and interest in said inventions and said application for letters patent of the United States, and in any United States or foreign, letters patent or patents, to be obtained therefor and thereon.

Assignors have invented certain new and useful inventions in:

METHODS AND COMPOSITIONS FOR DETECTING NON-HEMATOPOIETIC CELLS FROM A BLOOD SAMPLE

for which the following application has been filed in the United States of America.

Serial No.: 14/027,044

Filing Date: September 13, 2013

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignors hereby sell, assign, transfer and set over, to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application 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 therefor and thereon, and in and to any and all provisionals, divisions, continuations, continuations-in-part and substitutions of said application, or reissues, re-examinations or extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.
- 2. Assignors represent, warrant and covenant that, at the time of execution and delivery of this agreement, Assignors are the sole and lawful owners of the entire right, title and interest in and to said inventions and said application for letters patent, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement.
- 3. Assignors shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said application for letters patent; (b) letters patent for said inventions in any country, including any reissue, re-examination or extension of or interference proceedings; or (c) any provisional, division, continuation, continuation-in-part, or substitutions of any application for letters patent or any reissues, re-examinations, extensions or interference proceedings involving any letters patent, to be obtained thereon. To be clear, for purposes of this paragraph, "desirable" shall include, without limitation, any act necessary or useful in connection with United States laws and/or international conventions.
- 4. Assignors hereby authorize and request the Commissioner of Patents in the United States to issue the above mentioned letters patents of the United States to Assignee as the assignee of said inventions and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

5. "I hereby grant Assignee's attorneys, all of Morrison & Foerster LLP, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark office for recordation of this document, including the power to insert on this assignment the application number and filing date of said application when known."

In witness whereby, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date:	Signature;	Ping Lin
Date:	Signature;	Douglas T. Yamanishi
Date:	Signature:	George Walker
Date:	Signature:	Junquan Xu
Date:	Signature:	Mingxian Huang
Date:	Signature:	Guoliang Tao
Date;	Signature:	Lei Wu
Date:	Signature:	Xiaobo Wang
Date: $10/2/2013$	Signature:	Loe Ouyang
	3 of 4	

te: 9/30/15 Signature:

4 of 4

sd-626512

PATENT