505114270 09/27/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JACOB LESTER JAREMKO	05/29/2018
ABHILASH HAREENDRANATHAN	08/01/2018
MYLES MABEE	04/09/2018
RICHARD THOMPSON	09/26/2018
PIERRE BOULANGER	08/01/2018
KUMARADEVAN PUNITHAKUMAR	03/20/2018

RECEIVING PARTY DATA

Name:	ame: THE GOVERNORS OF THE UNIVERSITY OF ALBERTA	
Street Address:	Street Address: SUITE 4000, 10230 JASPER AVENUE	
City:	EDMONTON	
State/Country:	CANADA	
Postal Code:	T5J 4P6	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15575374

CORRESPONDENCE DATA

Fax Number:

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: 403-640-7737 Email: ariel@atmac.ca

Correspondent Name: ATMAC PATENT SERVICES LTD. **Address Line 1:** 7015 MACLEOD TRAIL SW, SUITE 400

Address Line 2: ATTN:ARIEL LIN

Address Line 4: CALGARY, CANADA T2H 2K6

ATTORNEY DOCKET NUMBER:	TEC0001USA01
NAME OF SUBMITTER:	FU-YIN LIN
SIGNATURE:	/Fu-Yin Lin/
DATE SIGNED:	09/27/2018

PATENT 505114270 REEL: 046988 FRAME: 0493

Total Attachments: 9 source=TEC0001USA01_assignment_world_wide_v2_executed#page1.tif source=TEC0001USA01_assignment_world_wide_v2_executed#page2.tif source=TEC0001USA01_assignment_world_wide_v2_executed#page3.tif source=TEC0001USA01_assignment_world_wide_v2_executed#page4.tif source=TEC0001USA01_assignment_world_wide_v2_executed#page5.tif source=TEC0001USA01_assignment_world_wide_v2_executed#page6.tif source=TEC0001USA01_assignment_world_wide_v2_executed#page7.tif source=TEC0001USA01_assignment_world_wide_v2_executed#page8.tif source=TEC0001USA01_assignment_world_wide_v2_executed#page8.tif

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE, (hereinafter referred to as the "ASSIGNOR(S)"):

- JAREMKO, Jacob Lester; 2A2.41 WMC, 8440-112St, Edmonton, Alberta T6G 2B7
- HAREENDRANATHAN, Abhilash; 2A2.41 WMC, 8440-112St, Edmonton, Alberta T6G 2B7
- MABEE, Myles; 2A2.41 WMC, 8440-112St, Edmonton, Alberta T6G 2B7
- THOMPSON, Richard; 1098 RTF, University of Alberta, Edmonton, Alberta T6G 2V2
- BOULANGER, Pierre; Athabasca Hall, Room 411, University of Alberta, Edmonton, Alberta T6G 2E8
- PUNITHAKUMAR, Kumaradevan; 2A2.42 Walter Mackenzie Centre, University of Alberta, Edmonton, Alberta T6G 2B7

has/have made an invention entitled SURFACE MODELING OF A SEGMENTED ECHOGENIC STRUCTURE FOR DETECTION AND MEASUREMENT OF ANATOMICAL ANOMALIES ("Invention") for which one or more applications for patent, design registration, utility model registration, or other form of protection, rights, or title have been or will be made in certain countries ("Applications"), as further described below:

- United States Patent Application No. 62/169,530, filed June 1, 2015;
- PCT International Patent Application No. <u>PCT/CA2016/050614</u>, filed <u>May 31, 2016</u>;
- Singapore national entry of the above PCT app, designated Singapore Patent Application No. <u>11201709470Q</u>, national entry completed on <u>November 16</u>, <u>2017</u>;
- United States national entry of the above PCT app, designated US Patent Application No. 15/575,374, national entry completed on November 19, 2017;
- Canadian national entry of the above PCT app, designated Canadian Patent Application No. <u>2,986,590</u>, national entry completed on <u>November 21, 2017</u>; and

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• Chinese national entry of the above PCT app, designated Chinese Patent Application No. <u>201680032321.7</u>, national entry completed on <u>December 1</u>, 2017.

AND WHEREAS, **The Governors of the University of Alberta** (hereinafter referred to as the "ASSIGNEE"), an organization under the laws of the Province of Alberta, Canada, having a place of business at **Suite 4000, 10230 Jasper Avenue, Edmonton, Alberta, T5J 4P6, Canada**, is desirous of acquiring the full and exclusive right, title and interest in and to said Invention, said Applications inclusive of all ancillary rights relating thereto, any and all priority rights derived from said Applications, and all patents, design registrations, utility model registrations and other forms of protection, rights and titles relating to said Invention, in any country or countries and in respect of the whole or any part or parts of or improvements to the Invention;

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR(S) does/do hereby confirm that ASSIGNOR(S) has/have transferred, conveyed and assigned, and by way of further assurance does/do hereby transfer, convey and assign, any and all of ASSIGNOR(S)'s respective rights, title and interest in and to: the Invention; the Applications; any further applications for patent, design registration, utility model registration or other forms of protection, rights or titles for the whole or any part or parts of or improvements to the Invention in any country or countries ("Further Applications") together with the right to file divisional applications, substitute applications and continuation applications of any one or more of the Applications and Further Applications ("Divisionals"); the right to obtain patents, design registrations, utility model registrations and all other forms of protection, rights and titles relating to the Invention; the right in and to any patent or reissue patent relating to the Applications, Further Applications and Divisionals ("Grants"); and the right to obtain any extensions / supplementary protection certificates ("Extensions"); together with the right to bring proceedings to recover damages and/or to obtain other remedies for acts committed in respect of one or more of the aforesaid Invention, Applications, Grants, Further Applications, Divisionals and Extensions, whether such acts are committed before or after the date of this Worldwide Assignment; with the intent that the Invention, Applications, Grants, Further Applications, Divisionals and Extensions are owned and enjoyed by ASSIGNEE absolutely to the full end of the term or terms for same.

ASSIGNOR(S) does/do hereby agree, upon request, to provide assistance and to execute any and all further documents, at the expense of ASSIGNEE and/or its successors and assigns (as applicable), which may be necessary or desirable to enable ASSIGNEE, and/or its successors and assigns (as applicable), to file, prosecute, bring proceedings and take other actions with respect to any and all of the Invention, Applications, Further Applications, Divisionals, Grants and Extensions, and any and all patents and registrations granted thereon and other forms of protection, rights and titles relating thereto, and ASSIGNOR(S) further agrees/agree to execute, upon request and at the expense of ASSIGNEE and/or its successors and assigns (as applicable), any and all further documents which may be necessary or desirable to vest or perfect the title of ASSIGNEE therein.

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ASSIGNOR(S) does/do hereby authorize ASSIGNEE or its patent agents or attorneys to insert, above, the jurisdictions, application numbers, filing dates and any other indicia identifying the Applications when such information is available for the purpose of recording this assignment.

ASSIGNOR(S) does/do hereby authorize and request The Commissioner of Patents or any equivalent authority to issue to ASSIGNEE each and every patent, registration and other form of protection, right, and title granted upon the Applications, Further Applications, Divisionals and Extensions.

THIS WORLDWIDE ASSIGNMENT shall inure to the benefit of ASSIGNEE and its successors and assigns, and shall be binding upon ASSIGNOR(S) and their successors and permitted assigns.

DELIVERY of this Worldwide Assignment by copy, however transmitted, constitutes valid and effective delivery. This Worldwide Assignment may be executed in one or more counterparts, each of which when so executed and delivered shall be an original, and such counterparts shall together constitute one and the same instrument.

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IN WII undersi		rldwide Assignment has been executed below by the
Date:	May 29, 2018	
17010		JAREMKO, Jacob Lester;
		2A2.41 WMC, 8440-112St, Edmonton, Alberta T6G 2B7
	SI	FATEMENT BY WITNESS
	I,(Name of Wi	whose full Post Office address is tness)
8440 - 112 Street, Edmonton, AB T6G 2B7 (Address of Witness)		et, Edmonton, AB T6G 2B7
		(Address of Witness)
~		present and did see the above named person, personally in the Worldwide Assignment, duly sign and execute same.
Date:	May 29, 2018	(Signature of Witness)

WORLDWIDE ASSIGNMENT - Page 4 of 9

IN WI unders		le Assignment has been executed below by the
Date:	01 August 2018	Mediak
T. 1170 (HAREENDRANATHAN, Abhilash
		2A2.41 WMC, 8440-112St, Edmonton, Alberta T6G 2B7
	STATEI I Semil Ragini Surenc (Name of Witness)	MENT BY WITNESS **********************************
	N	W Edmonton, Alberta, T6W0C4
		dress of Witness)
		nt and did see the above named person, personally Worldwide Assignment, duly sign and execute same.
Date:	01 August 2018	Marie Company
		(Signature of Witness)

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Date:	April 9th 2018	Apr Make
		MABEÉ, Myles
		2A2.41 WMC, 8440-112St, Edmonton, Alberta T6G 2B7
	STA	TEMENT BY WITNESS
	I,Amy Rudkoski	, whose full Post Office address is
	(Name of Witne	ess)
	731 35 St NW, Calgary, A	.B, T2N-2Z6
		(Address of Witness)
		resent and did see the above named person, personally the Worldwide Assignment, duly sign and execute same.
Date:_	April 9th 2018	
		(Signature of Witness)

IN WITNESS WHEREOF, this Worldwide Assignment has been executed below by the undersigned:

WORLDWIDE ASSIGNMENT - Page 6 of 9

IN WITNESS WHEREOF, this Worldwide Assignment has been executed below by the undersigned:

Date: 50p+26/2018

THOMPSON, Richard

1098 RTF/University of Alberta, Edmonton, Alberta 160 2V2

STATEMENT BY WITNESS

I, Name of Witness) whose full Post Office address is

3343 24 of NW TOT 156 Edmonter, AB Complex.

(Address of Witness)

hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Worldwide Assignment, duly sign and execute same.

Date: 5-9+26,2015

Signature of Witness)

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IN WITN		wide Assignment has been executed below by the
Date: A	ve 1,8018	BOULANGER, Pierre Athabasca Hall, Room 411, University of Alberta, Edmonton, Alberta T6G 2E8
	STAT	TEMENT BY WITNESS
I,	, RAY YAWG (Name of Witnes	, whose full Post Office address is
<u>De</u>		ROSS CANCER INSTITUTE, 11560 UNIVERSITY AVENUE Address of Witness)
	·	
hereby dec known to i	clare that I was personally pre me to be a person named in th	esent and did see the above named person, personally ne Worldwide Assignment, duly sign and execute same.
Date: AV6	n 1, 2018	(Signature of Witness)

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IN WITNESS WHEREOF, this Wor undersigned:	Idwide Assignment has been executed below by the
Date: 2018 Max 20	Je Pant
	PUNITHAKUMAR, Kumaradevan
	2A2.42 Walter Mackenzie Centre, University of Alberta, Edmonton, Alberta T6G 2B7
ST.	ATEMENT BY WITNESS
· · · · · · · · · · · · · · · · · · ·	, whose full Post Office address is ness)
740-11121824 Ave, Edmi	vion 198 166 014
	(Address of Witness) **
	present and did see the above named person, personally n the Worldwide Assignment, duly sign and execute same.
Date: March 10th, 2018	(Signature of Witness)

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PATENT REEL: 046988 FRAME: 0503

RECORDED: 09/27/2018