PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5877994

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DANIEL I. HARJES	03/22/2019
ERIC LEE	03/12/2019
JIM WOO PARK	05/10/2019

RECEIVING PARTY DATA

Name:	TC1 LLC
Street Address:	ONE ST. JUDE MEDICAL DRIVE
City:	ST. PAUL
State/Country:	MINNESOTA
Postal Code:	55117

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16721432

CORRESPONDENCE DATA

Fax Number: (314)621-2307

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: 3146215070

Email: uspatents@armstrongteasdale.com ARMSTRONG TEASDALE LLP **Correspondent Name:** Address Line 1: 7700 FORSYTH BLVD., SUITE 1800

Address Line 4: ST. LOUIS, MISSOURI 63105

ATTORNEY DOCKET NUMBER:	13333USO1
NAME OF SUBMITTER:	CHRISTOPHER M. GOFF
SIGNATURE:	/Christopher M. Goff/
DATE SIGNED:	12/19/2019

Total Attachments: 3

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> **PATENT REEL: 051337 FRAME: 0673** 505831061

In the United States Patent and Trademark Office

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Inventor(s):	Daniel I. Harjes, et al.	Docket No.:	13333USL1
Serial No.:	62/783,950	Group:	To be assigned
Confirmation No:	5350	Examiner:	To be assigned
Filed:	December 21, 2018		
For:	IMPLANTABLE BLOOD PUMP ASSEMI OF ASSEMBLING SAME	BLY INCLUDING	PRESSURE SENSOR AND METHODS
	Assign	ment	
Commissioner for F P.O. Box 1450 Alexandria, VA 223	Patents		
Sir:			
Suwanee, GA (here an application for L	 Harjes residing at Carlisle, MA, Eric Lee einafter referred to as Assignors), have ma etters Patent of the United States of America ers Patent of the United States of America 	ade an invention a ica therefor or (2)	and have either (1) previously executed is contemporaneously executing an
IMPLANTABLE B	LOOD PUMP ASSEMBLY INCLUDING P SAM		SOR AND METHODS OF ASSEMBLING
Minnesota 55117 right, title and interes	C1 LLC a corporation of the State of Dela United States of America, (hereinafter refe est in and to said invention and under said ed States and in any and all foreign count	erred to as "Assign Letters Patent o	es at One St. Jude Medial Drive, St. Paul, nee"), is desirous of acquiring the entire r similar legal protection to be obtained
receipt of which is right, title and inter- States and its territ application or any of thereof, including a	E, TO ALL WHOM IT MAY CONCERN: It nereby acknowledged, Assignors hereby sest to said invention and in and to any and orial possessions and in any and all foreignontinuation, continuation-in-part, divisionally extensions thereof, or any legal equivalency be granted, including any and all continuation.	sell, assign and tra I all Letters Paten In countries to be al, renewal, substi Ilent thereof in an	ansfer to Assignee the full and exclusive t or similar legal protection in the United obtained for said invention by said itute, re-examination, coversion or reissue
	covenant that no assignment, sale, agreen onflict with this assignment and sale.	nent or encumbra	nce has been or will be made or entered
and documents relicountries as may but its legal representation extend and enforce	ovenant that Assignors will promptly provi ating to said application, said invention an e known and accessible to Assignors and tives any and all papers, instruments or a e said application, said invention and said be necessary or desirable to carry out the	d said Letters Pat Assignors will pro ffidavits required t Letters Patent an	tent and legal equivalents in foreign omptly execute and deliver to Assignee or to apply for, obtain, maintain, issue, d said equivalents thereof in any foreign
IN WITNESS WHE	REOF, Assignor has executed this docum	nent on the date in	ndicated below:
D	Daniel I. Harjes	Date: 3/22/	2019
	Barror it Harjoo		
		Date:	
	Eric Lee		

PATENT REEL: 051337 FRAME: 0674

Jin Woo Park

Date:

In the United States Patent and Trademark Office

Inventor(s):

Daniel I. Harjes, et al.

Docket No.:

13333USL.1

Serial No.:

62/783.950

Group:

To be assigned

Confirmation No:

5350

Examiner:

To be assigned

Filed:

December 21, 2018

For:

IMPLANTABLE BLOOD PUMP ASSEMBLY INCLUDING PRESSURE SENSOR AND METHODS

OF ASSEMBLING SAME

Assignment

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

WHEREAS Daniel I. Harjes residing at Carlisle, MA; Eric Lee residing at Oakland, CA; and Jin Woo Park residing at Suwanee, GA (hereinafter referred to as Assignors), have made an invention and have either (1) previously executed an application for Letters Patent of the United States of America therefor or (2) is contemporaneously executing an application for Letters Patent of the United States of America for the invention which is entitled:

IMPLANTABLE BLOOD PUMP ASSEMBLY INCLUDING PRESSURE SENSOR AND METHODS OF ASSEMBLING SAME

AND WHEREAS TC1 LLC a corporation of the State of Delaware, having offices at One St. Jude Medial Drive, St. Paul, Minnesota 55117 United States of America, (hereinafter referred to as "Assignee"), is desirous of acquiring the entire right, title and interest in and to said invention and under said Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

NOW. THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that for good and valuable consideration, the receipt of which is hereby acknowledged, Assignors hereby sell, assign and transfer to Assignee the full and exclusive right, title and interest to said invention and in and to any and all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, continuation-in-part, divisional, renewal, substitute, re-examination, coversion or reissue thereof, including any extensions thereof, or any legal equivalent thereof in any foreign country for the full term or terms for which the same may be granted, including any and all convention rights.

Assignors hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

Assignors further covenant that Assignors will promptly provide, upon written request, Assignee with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to Assignors and Assignors will promptly execute and deliver to Assignee or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue, extend and enforce said application, said invention and said Letters Patent and said equivalents thereof in any foreign country which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, Assignor has executed this document on the date indicated below:

Daniel I. Harjes	Date:	
Eric Lee	Date:	12 HAL 2019
Jin Woo Park	Date:	

PATENT REEL: 051337 FRAME: 0675

In the United States Patent and Trademark Office

Inventor(s): Daniel I. Haries, et al. Docket No.: 13333USL1 Serial No.: 62/783,950 Group: To be assigned Confirmation No: 5350 Examiner To be assigned Filed: December 21, 2018

For

IMPLANTABLE BLOOD PUMP ASSEMBLY INCLUDING PRESSURE SENSOR AND METHODS

OF ASSEMBLING SAME

Assignment

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

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IMPLANTABLE BLOOD PUMP ASSEMBLY INCLUDING PRESSURE SENSOR AND METHODS OF ASSEMBLING

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NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN. Be it known that for good and valuable consideration, the receipt of which is hereby acknowledged. Assignors hereby sell, assign and transfer to Assignee the full and exclusive right, title and interest to said invention and in and to any and all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, continuation-in-part, divisional, renewal, substitute, re-examination, coversion or reissue thereof, including any extensions thereof, or any legal equivalent thereof in any foreign country for the full term or terms for which the same may be granted, including any and all convention rights.

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Assignors further covenant that Assignors will promptly provide, upon written request, Assignee with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to Assignors and Assignors will promptly execute and deliver to Assignee or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue, extend and enforce said application, said invention and said Letters Patent and said equivalents thereof in any foreign country which may be necessary or desirable to carry out the purposes thereof,

IN WITNESS WHEREOF, Assignor has executed this document on the date indicated below:

Daniel I. Harjes	Date:	
Eric Lee	Date	
Jin Woo Park	Cale:	TOMAYION

PATENT REEL: 051337 FRAME: 0676