506619812 04/20/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6666619

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT	
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ASSIGNEE previously recorded on Reel 055237 Frame 0672. Assignor(s) hereby confirms the ASSIGNOR: SCHENCK, ALAN L. ASSIGNOR: MULLER PAUL F. ASSIGNOR, FITZGERALD, KEIF M. ASSIGNEE: TCI1 LLC.	

CONVEYING PARTY DATA

Name	Execution Date
ALAN L. SCHENCK	12/06/2018
PAUL F. MULLER	11/20/2018
KEIF M. FITZGERALD	11/25/2018

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: 8

Property Type	Number
Application Number:	14203978
Application Number:	15198342
Application Number:	15920553
Application Number:	17174091
Application Number:	62218508
Application Number:	62218509
Application Number:	62220040
PCT Number:	US2016051553
	·

CORRESPONDENCE DATA

Fax Number: (314)612-2307

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
Correspondent Name: ARMSTRONG TEASDALE LLP
Address Line 1: 7700 FORSYTH BLVD STE 1800
Address Line 4: ST LOUIS, MISSOURI 63105

PATENT REEL: 056324 FRAME: 0043

506619812

ATTORNEY DOCKET NUMBER:	35398-800	
NAME OF SUBMITTER: ANDREW B. WHITEHEAD		
SIGNATURE:	/Andrew B. Whitehead/	
DATE SIGNED: 04/20/2021		
Total Attachments: 7		
Isource=P04031USC1 Assignment Recordation Coversheet 20APB2021#page1.tif		

source=P04031USC1_Assignment_Recordation_Coversheet_20APR2021#page1.tif source=P04031USC1_Assignment_Recordation_Coversheet_20APR2021#page2.tif source=P04031USC1_Assignment_Recordation_Coversheet_20APR2021#page3.tif source=P04031USC1_Assignment_Recordation_Coversheet_20APR2021#page4.tif source=P04031USC1_Original_Assignment#page1.tif

source=P04031USC1_Original_Assignment#page2.tif source=P04031USC1_Original_Assignment#page3.tif

RECORDATION FORM COVER SHEET				
PATENTS ONLY				
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.				
Name of conveying party(ies) Alan L. Schenck	2. Name and address of receiving party(ies) TC1 LLC			
Paul F. Muller	Name: TC1 LLC			
Keif M. Fitzgerald	Internal Address:			
Additional name(s) of conveying party(ies) attached? Yes Nature of conveyance/Execution Date(s):	Street Address: One St. Jude Medical Drive City: St. Paul State: MN			
Execution Date(s) 12/06/18, 11/20/2018, 11/25/2018				
☐ Assignment ☐ Merger☐ Security Agreement ☐ Change of Name				
Joint Research Agreement				
Government Interest Assignment	Country: US Zip: 55117			
Executive Order 9424, Confirmatory License	Country			
Other See attached	Additional name(s) & address(es) attached? Yes No			
4. Application or patent number(s):	document serves as an Oath/Declaration (37 CFR 1.63).			
A. Patent Application No.(s)	B. Patent No.(s)			
17/174,091, 15/920,553, PCT/US2016051553, 62/218,508, 62/218,509, 62/220,040, 15/198,342 14/203,978				
Additional numbers attached? Yes No				
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 8			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP	6. Total number of applications and patents			
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 8			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP	6. Total number of applications and patents involved: 8			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP Internal Address: Suite 1800	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0.00			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0.00 Authorized to be charged to deposit account			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP Internal Address: Suite 1800	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0.00 Authorized to be charged to deposit account Enclosed			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP Internal Address: Suite 1800 Street Address: 7700 Forsyth Boulevard City: St. Louis	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$_0.00 Authorized to be charged to deposit account			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP Internal Address: Suite 1800 Street Address: 7700 Forsyth Boulevard City: St. Louis State: MO Zip: 61305	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0.00 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP Internal Address: Suite 1800 Street Address: 7700 Forsyth Boulevard City: St. Louis State: MO Zip: 61305 Phone Number: 314-621-5070	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0.00 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number 012384			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP Internal Address: Suite 1800 Street Address: 7700 Forsyth Boulevard City: St. Louis State: MO Zip: 61305 Phone Number: 314-621-5070	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0.00 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP Internal Address: Suite 1800 Street Address: 7700 Forsyth Boulevard City: St. Louis State: MO Zip: 61305 Phone Number: P04031USC1	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0.00 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number 012384			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP Internal Address: Suite 1800 Street Address: 7700 Forsyth Boulevard City: St. Louis State: MO Zip: 61305 Phone Number: 214-621-5070 Pocket Number: P04031USC1 Email Address: 4Andrew B. Whitehead/ Signature Signature	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0.00 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number 012384 Authorized UserName Andrew B. Whitehead			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP Internal Address: Suite 1800 Street Address: 7700 Forsyth Boulevard City: St. Louis State: MO Zip: 61305 Phone Number: P04031USC1 Email Address: uspatents@armstrongteasdale.com 9. Signature: /Andrew B. Whitehead/ Signature Andrew B. Whitehead	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0.00 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number 012384 Authorized UserName Andrew B. Whitehead 2021-04-20 Date Total number of pages including cover 7			
5. Name and address to whom correspondence concerning document should be mailed: Name: Armstrong Teasdale LLP Internal Address: Suite 1800 Street Address: 7700 Forsyth Boulevard City: St. Louis State: MO Zip: 61305 Phone Number: P04031USC1 Email Address: uspatents@armstrongteasdale.com 9. Signature: /Andrew B. Whitehead/ Andrew B. Whitehead Name of Person Signing	6. Total number of applications and patents involved: 8 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0.00 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number 012384 Authorized UserName Andrew B. Whitehead 2021-04-20 Date			

ATTACHMENT TO RECORDATION FORM COVER SHEET

Section 3

This Recordation Form Cover Sheet is being submitted to correct an error in a previously recorded coversheet, Reel/Frame 055237/0672.

In the original submission, the Assignee was incorrectly identified as TCI1 LLC. The assignment should be corrected to reflect the Assignee as TC1 LLC.

Guidelines for Completing Patents Cover Sheets (PTO-1595)

Cover Sheet information must be submitted with each document to be recorded. If the document to be recorded concerns both patents and trademarks separate patent and trademark cover sheets, including any attached pages for continuing information, must accompany the document. All pages of the cover sheet should be numbered consecutively, for example, if both a patent and trademark cover sheet is used, and information is continued on one additional page for both patents and trademarks, the pages of the cover sheet would be numbered from 1 to 4.

Item 1. Name of Conveying Party(ies).

Enter the full name of the party(ies) conveying the interest. If there is insufficient space, enter a check mark in the "Yes" box to indicate that additional information is attached. The name of the additional conveying party(ies) should be placed on an attached page clearly identified as a continuation of the information Item 1. Enter a check mark in the "No" box, if no information is contained on an attached page. If the document to be recorded is a joint research agreement, enter the name(s) of the party(ies) other than the owner of the patent or patent application as the conveying party(ies).

Item 2. Name and Address of Receiving Party(ies).

Enter the name and full address of the first party receiving the interest. If there is more than one party receiving the interest, enter a check mark in the "Yes" box to indicate that additional information is attached. Enter a check mark in the "No" box, if no information is contained on an attached page. If the document to be recorded is a joint research agreement, enter the name(s) of the patent or patent application owner(s) as the receiving party.

Item 3. Nature of Conveyance/Execution Date(s).

Enter the execution date(s) of the document. It is preferable to use the name of the month, or an abbreviation of that name, in order that confusion over dates is minimized. Place a check mark in the appropriate box describing the nature of the conveying document. If the "Other" box is checked, specify the nature of the conveyance.

Item 4. Application Number(s) or Patent Number(s).

Indicate the application number(s), and/or patent number(s) against which the document is to be recorded. National application numbers must include both the series code and a six-digit number (e.g., 07/123,456), and international application numbers must be complete (e.g., PCT/US91/12345).

Enter a check mark in the appropriate box: "Yes" or "No" if additional numbers appear on attached pages. Be sure to identify numbers included on attached pages as the continuation of Item 4. Also enter a check mark if this Assignment is being filed as an Oath/Declaration (37 CFR 1.63).

Item 5. Name and Address of Party to whom correspondence concerning the document should be

mailed. Enter the name and full address of the party to whom correspondence is to be mailed.

Item 6. Total Applications and Patents involved.

Enter the total number of applications and patents identified for recordation. Be sure to include all applications and patents identified on the cover sheet and on additional pages.

Block 7. Total Fee Enclosed.

Enter the total fee enclosed or authorized to be charged. A fee is required for each application and patent against which the document is recorded.

Item 8. Payment Information.

Enter the deposit account number and authorized user name to authorize charges.

Item 9. Signature.

Enter the name of the person submitting the document. The submitter must sign and date the cover sheet. Enter the total number of pages including the cover sheet, attachments, and document.

This collection of information is required by 35 USC 261 and 262 and 15 USC 1057 and 1060. The information is used by the public to submit (and by the USPTO to process) patent and trademark assignment requests. After the USPTO records the information, the records for patent and trademarks, assignments, and other associated documents can be inspected by the public. To view documents recorded under secrecy orders or documents recorded due to the interest of the federal government, a written authorization must be submitted. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the form to the USPTO. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Manager of the Assignment Division, USPTO, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450.

Privacy Act Statement for Patent Assignment Recordation Form Cover Sheet

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with the above request for information. This collection of information is authorized by 35 U.S.C. 1, 2, 261 and E.O. 9424. This information will primarily be used by the USPTO for the recordation of assignments related to patents and patent applications. Submission of this information is voluntary but is required in order for the USPTO to record the requested assignment. If you do not provide the information required on the cover sheet, the assignment will not be recorded, and all documents will be returned to you.

After the information is recorded, the records and associated documents can be inspected by the public and are not confidential, except for documents that are sealed under secrecy orders or related to unpublished patent applications. Assignment records relating to unpublished patent applications are maintained in confidence in accordance with 35 U.S.C. 122. Records open to the public are searched by users for the purpose of determining ownership for other property rights with respect to patents and trademarks.

Routine uses of the information you provide may also include disclosure to appropriate Federal, state, local, or foreign agencies in support of their enforcement duties and statutory or regulatory missions, including investigating potential violations of law or contract and awarding contracts or other benefits; to a court, magistrate, or administrative tribunal in the course of presenting evidence; to members of Congress responding to requests for assistance from their constituents; to the Office of Management and Budget in connection with the review of private relief legislation; to the Department of Justice in connection with a Freedom of Information Act request; to a contractor in the performance of their duties; to the Office of Personnel Management for personnel studies; and to the General Services Administration (GSA) as part of their records management responsibilities under the authority of 44 U.S.C. 2904 and 2906. Such disclosure to GSA shall not be used to make determinations about individuals.

In the United States Patent and Trademark Office

Inventors:	Alan L. Schenck	Docket No.:	P04031USO	
Serial No.:	15/920,553	Group:		
Confirmation No:	1059	Examiner:		
Filed:	March 14, 2018			
For:	FLUID HANDLING SYSTEM			
		seignment leint leventere		
residing in San Jos previously execute	Patents 313-1450 Schenck residing in Sunnyvale, se, California, (hereinafter collected an application for Letters Pate	tively referred to as Assignors), have nt of the United States of America th	San Carlos, California, and Keif M. Fitzgerald made an invention and have each either (1) erefor or (2) are contemporaneously executing	
an application for L	etters Patent of the United State	es of America for the invention which	is entitled:	
		FLUID HANDLING SYSTEM		
Minnesota 55117, interest in and to sa and in any and all f NOW, THEREFOR is hereby acknowle said invention and and in any and all f divisional, renewal, thereof in any forei	United States of America, (herei aid invention and under said Let foreign countries. RE, TO ALL WHOM IT MAY COI edged, the Assignors hereby sell in and to any and all Letters Pat foreign countries to be obtained, substitute, re-examination, con gn country for the full term or terms.	inafter referred to as Assignee), is deters Patent or similar legal protection NCERN: Be it known that for good at a saign and transfer to the Assignee ent or similar legal protection in the to for said invention by said application version or reissue thereof, including times for which the same may be grant.	offices at One St. Jude Medical Drive, St. Paul sirous of acquiring the entire right, title and to be obtained therefor in the United States and valuable consideration, the receipt of which the full and exclusive right, title and interest to Juited States and its territorial possessions or any continuation, continuation-in-part, all extensions thereof, or any legal equivalent ed, including any and all convention rights.	
	eby covenant that no assignmer this assignment and sale.	it, sale, agreement or encumbrance i	nas been or will be made or entered into which	
The Assignors further covenant that the 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 the Assignors and that they 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.				
Alm.	L Sehn	cuted this document on the date indic	12/6/2018	
	Alan L. Schenck		Date	
	Paul F. Muller		Date	

Keif M. Fitzgerald

PATENT REEL: 056324 FRAME: 0049

Date

In the United States Patent and Trademark Office

Inventors:

Alan L. Schenck

Docket No.:

P04031USO

Serial No.:

15/920,553

Group:

Confirmation No:

1059

Examiner:

Filed:

March 14, 2018

For:

FLUID HANDLING SYSTEM

Assignment -- Joint Inventors

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

Sir:

WHEREAS Alan L. Schenck residing in Sunnyvale, California, Paul F. Muller residing in San Carlos, California, and Keif M. Fitzgerald residing in San Jose, California, (hereinafter collectively referred to as Assignors), have made an invention and have each either (1) previously executed an application for Letters Patent of the United States of America therefor or (2) are contemporaneously executing an application for Letters Patent of the United States of America for the invention which is entitled:

FLUID HANDLING SYSTEM

AND WHEREAS TC1 LLC, a limited liability company of the State of Delaware, having offices at One St. Jude Medical 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, the Assignors hereby sell, assign and transfer to the 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, conversion or reissue thereof, including all 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.

The 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.

The Assignors further covenant that the 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 the Assignors and that they 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, the Assignors have executed this document on the date indicated below:

Alan L. Scherick

Paul F. Muller

Date

Keif M. Fitzgerald

Date

In the United States Patent and Trademark Office

Inventors:

Alan L. Schenck

Docket No.:

P04031USO

Serial No.:

15/920,553

Group:

Confirmation No:

1059

Examiner:

Filed:

March 14, 2018

For:

FLUID HANDLING SYSTEM

Assignment - Joint Inventors

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

Sir:

WHEREAS Alan L Schenck residing in Sunnyvale, California, Paul F. Muller residing in San Carlos, California, and Keif M. Fitzgerald residing in San Jose, California, (hereinafter collectively referred to as Assignors), have made an invention and have each either (1) previously executed an application for Letters Patent of the United States of America therefor or (2) are contemporaneously executing an application for Letters Patent of the United States of America for the invention which is entitled:

FLUID HANDLING SYSTEM

AND WHEREAS TC1 LLC, a limited liability company of the State of Delaware, having offices at One St. Jude Medical 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, the Assignors hereby sell, assign and transfer to the 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, conversion or reissue thereof, including all 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.

The 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.

The Assignors further covenant that the 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 the Assignors and that they 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, the Assignors have executed this document on the date indicated below:

Alan L. Schenck

Date

Paul F. Muller

Date

L. Schenck

Date

Date

Date

Date

Date

Date

PATENT REEL: 056324 FRAME: 0051

RECORDED: 04/20/2021