### 503927527 07/22/2016

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3974180

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
PRESTON L. GROTHE	06/13/2016
MATTHEW D. CAMBRONNE	06/08/2016
JOSEPH P. HIGGINS	06/13/2016
WILLIAM F. KUESTER III	06/24/2016
BENJAMIN HASELMAN	06/09/2016
JOSHUA J. CRANSTON	06/08/2016
RIC A. GOULD	06/13/2016
NICHOLAS W. RYDBERG	07/20/2016

# **RECEIVING PARTY DATA**

Name:	CARDIOVASCULAR SYSTEMS, INC.	
Street Address:	1225 OLD HIGHWAY 8 NW	
City:	MINNEAPOLIS	
State/Country:	MINNESOTA	
Postal Code:	55112	

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15168881

### **CORRESPONDENCE DATA**

Fax Number: (612)333-6798

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: 612-333-2111

Email: mjohnston@btlaw.com

JEFFREY R. STONE, BARNES & THORNBURG LLP **Correspondent Name:** 

Address Line 1: 225 S 6 ST Address Line 2: **SUITE 2800** 

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

NAME OF SUBMITTER: JEFFREY R. STONE SIGNATURE: /Jeffrey R. Stone/ **DATE SIGNED:** 07/22/2016

PAIENI REEL: 039228 FRAME: 0904 503927527

# Total Attachments: 8 source=Assignments#page1.tif source=Assignments#page3.tif source=Assignments#page4.tif source=Assignments#page5.tif source=Assignments#page6.tif source=Assignments#page7.tif source=Assignments#page8.tif

PATENT REEL: 039228 FRAME: 0905

Docket No.: 68890.247963.329.US.U1

### PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

WHEREAS, Preston L. Grothe, a citizen of the United States, residing in Maple Grove, Minnesota:

hereafter referred to as "THE UNDERSIGNED", has made an invention entitled ROTATIONAL SYSTEMS COMPRISING A POLYMER DRIVESHAFT, filed May 31, 2016 and assigned serial number 15/168881;

AND, WHEREAS, Cardiovascular Systems, Inc., hereafter referred to as ASSIGNEE, a corporation organized under the laws of Delaware and whose place of business and business address is 1225 Old Highway 8 NW, New Brighton, Minnesota 55112, is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE in consideration of the sum of One Dollar, the receipt whereof is acknowledged, and other good and valuable consideration, THE UNDERSIGNED hereby sells, assigns and transfers unto ASSIGNEE the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to all divisionals, continuations, continuations in part, reissues, reexaminations or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extension of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said invention including an assignment of all rights under the provision of international conventions and all Letters Patent of foreign countries which may be granted therefrom; the UNDERSIGNED hereby authorizes the Commissioner of Patents to issue any and all United States Letters Patent for the aforesald invention to ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED, hereby agrees that THE UNDERSIGNED, his/her executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represents and agrees with said Assignee its successors and assignees, that no assignment grant, mortgage, ilicense or other agreement affecting the rights and property herein conveyed has been or will be made to others by THE UNDERSIGNED, and that full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED has hereunto set his/her hand on the date indicated below.

Preston L. Grothe Date

No Legalization Required

DMS 4006953v1

Docket No.: 68880.247983.329.US.U1

### PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

WHEREAS, Matthew D. Cambronne, a citizen of the United States, residing in North Oaks, Minnesota:

hereafter referred to as "THE UNDERSIGNED", has made an invention entitled ROTATIONAL SYSTEMS COMPRISING A POLYMER DRIVESHAFT, filed May 31, 2016 and assigned serial number 15/168881:

AND, WHEREAS, Cardiovascular Systems, Inc., hereafter referred to as ASSIGNEE, a corporation organized under the laws of Delaware and whose place of business and business address is 1225 Old Highway 8 NW, New Brighton, Minnesota 55112, is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE in consideration of the sum of One Dollar, the receipt whereof is acknowledged, and other good and valuable consideration, THE UNDERSIGNED hereby sells, assigns and transfers unto ASSIGNEE the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to all divisionals, continuations, continuations in part, reissues, reexaminations or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extension of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said invention including an assignment of all rights under the provision of international conventions and all Letters Patent of foreign countries which may be granted therefrom; the UNDERSIGNED hereby authorizes the Commissioner of Patents to issue any and all United States Letters Patent for the aforesaid invention to ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED, hereby agrees that THE UNDERSIGNED, his/her executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represents and agrees with said Assignee its successors and assignees, 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 full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED has hereunto set his/her hand on the date indicated below.

Matthew D. Cambronne

Date

No Legalization Required

DMS 4006959v1

Docket No.: 68890,247883,329,US,U1

### PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

WHEREAS, Joseph P. Higgins, a citizen of the United States, residing in Minnetonka, Minnesota;

hereafter referred to as "THE UNDERSIGNED", has made an invention entitled ROTATIONAL SYSTEMS COMPRISING A POLYMER DRIVESHAFT, filed May 31, 2016 and assigned serial number 15/168881:

AND, WHEREAS, Cardiovascular Systems, Inc., hereafter referred to as ASSIGNEE, a corporation organized under the laws of Delaware and whose place of business and business address is 1225 Old Highway 8 NW, New Brighton, Minnesota 55112, is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE in consideration of the sum of One Dollar, the receipt whereof is acknowledged, and other good and valuable consideration, THE UNDERSIGNED hereby sells, assigns and transfers unto ASSIGNEE the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to all divisionals, continuations, continuations in part, reissues, reexaminations or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extension of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said invention including an assignment of all rights under the provision of international conventions and all Letters Patent of foreign countries which may be granted therefrom; the UNDERSIGNED hereby authorizes the Commissioner of Patents to issue any and all United States Letters Patent for the aforesaid invention to ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED, hereby agrees that THE UNDERSIGNED, his/her executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represents and agrees with said Assignee its successors and assignees, 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 full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED has hereunto set his/her hand on the date

indicated below.

Joseph P. Higgins

Date

6/13/16

No Legalization Required

DMS 4006963v1

Docket No.: 68890.247963.329.US.U1

### PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

WHEREAS, William F. Kuester III, a citizen of the United States, residing in Maplewood, Minnesota;

hereafter referred to as "THE UNDERSIGNED", has made an invention entitled ROTATIONAL SYSTEMS COMPRISING A POLYMER DRIVESHAFT, filed May 31, 2016 and assigned serial number 15/168881:

AND, WHEREAS, Cardiovascular Systems, Inc., hereafter referred to as ASSIGNEE, a corporation organized under the laws of Delaware and whose place of business and business address is 1225 Old Highway 8 NW, New Brighton, Minnesota 55112, is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE in consideration of the sum of One Dollar, the receipt whereof is acknowledged, and other good and valuable consideration, THE UNDERSIGNED hereby sells, assigns and transfers unto ASSIGNEE the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to all divisionals, continuations, continuations in part, reissues, reexaminations or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extension of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said invention including an assignment of all rights under the provision of international conventions and all Letters Patent of foreign countries which may be granted therefrom; the UNDERSIGNED hereby authorizes the Commissioner of Patents to issue any and all United States Letters Patent for the aforesald invention to ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED, hereby agrees that THE UNDERSIGNED, his/her executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represents and agrees with said Assignee its successors and assignees, 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 full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED has hereunto set his/her hand on the date indicated below.

William F. Kuester III

24 SUN 2416

No Legalization Required

DMS 4006965v1

Docket No.: 68890.247863.329.US.U1

### PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

WHEREAS, Benjamin Haselman, a citizen of the United States, residing in St. Paul, Minnesota;

hereafter referred to as "THE UNDERSIGNED", has made an invention entitled ROTATIONAL SYSTEMS COMPRISING A POLYMER DRIVESHAFT, filed May 31, 2016 and assigned serial number 15/168881:

AND, WHEREAS, Cardiovascular Systems, Inc., hereafter referred to as ASSIGNEE, a corporation organized under the laws of Delaware and whose place of business and business address is 1225 Old Highway 8 NW, New Brighton, Minnesota 55112, is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE in consideration of the sum of One Dollar, the receipt whereof is acknowledged, and other good and valuable consideration, THE UNDERSIGNED hereby sells, assigns and transfers unto ASSIGNEE the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to all divisionals, continuations, continuations in part, reissues, reexaminations or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extension of such patents, and in and to any and all applications which have been or shall be filled in any foreign countries for Letters Patent on the said invention including an assignment of all rights under the provision of international conventions and all Letters Patent of foreign countries which may be granted therefrom; the UNDERSIGNED hereby authorizes the Commissioner of Patents to Issue any and all United States Letters Patent for the aforesaid invention to ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED, hereby agrees that THE UNDERSIGNED, his/her executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represents and agrees with said Assignee its successors and assignees, 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 full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED has hereunto set his/her hand on the date indicated below.

Benjamin Haselman

Date

No Lagalication Required

DMS 4006969v1

Docket No.: 68890,247963,329,US,U1

### PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

WHEREAS, Joshua J. Cranston, a citizen of the United States, residing in Andover, Minnesota;

hereafter referred to as "THE UNDERSIGNED", has made an invention entitled ROTATIONAL SYSTEMS COMPRISING A POLYMER DRIVESHAFT, filed May 31, 2016 and assigned serial number 15/168881:

AND, WHEREAS, Cardiovascular Systems, Inc., hereafter referred to as ASSIGNEE, a corporation organized under the laws of Delaware and whose place of business and business address is 1225 Old Highway 8 NW, New Brighton, Minnesota 55112, is desirous of acquiring the entire right, title and interest in the same:

NOW, THEREFORE in consideration of the sum of One Dollar, the receipt whereof is acknowledged, and other good and valuable consideration, THE UNDERSIGNED hereby sells, assigns and transfers unto ASSIGNEE the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to all divisionals, continuations, continuations in part, reissues, reexaminations or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extension of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said invention including an assignment of all rights under the provision of international conventions and all Letters Patent of foreign countries which may be granted therefrom; the UNDERSIGNED hereby authorizes the Commissioner of Patents to issue any and all United States Letters Patent for the aforesaid invention to ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED, hereby agrees that THE UNDERSIGNED, his/her executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represents and agrees with said Assignee its successors and assignees, 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 full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED has hereunto set his/her hand on the date indicated below.

Jeseph-J. Cranston

Joshua

gJUN 2016

Date

No Legalization Required

DMS 400697 5vt

Docket No.: 68890.247963,329.US.U1

### PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

WHEREAS, Ric A. Gould, a citizen of the United States, residing in Brooklyn Park, Minnesota;

hereafter referred to as "THE UNDERSIGNED", has made an invention entitled ROTATIONAL SYSTEMS COMPRISING A POLYMER DRIVESHAFT, filed May 31, 2016 and assigned serial number 15/168881;

AND, WHEREAS, Cardiovascular Systems, Inc., hereafter referred to as ASSIGNEE, a corporation organized under the laws of Delaware and whose place of business address is 1225 Old Highway 8 NW, New Brighton, Minnesota 55112, is desirous of acquiring the entire right, title and interest in the same:

NOW, THEREFORE in consideration of the sum of One Dollar, the receipt whereof is acknowledged, and other good and valuable consideration, THE UNDERSIGNED hereby sells, assigns and transfers unto ASSIGNEE the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to all divisionals, continuations, continuations in part, reissues, reexaminations or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extension of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said invention including an assignment of all rights under the provision of international conventions and all Letters Patent of foreign countries which may be granted therefrom; the UNDERSIGNED hereby authorizes the Commissioner of Patents to issue any and all United States Letters Patent for the aforesaid invention to ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED, hereby agrees that THE UNDERSIGNED, his/her executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represents and agrees with sald Assignee its successors and assignees, 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 full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED has hereunto set his/her hand on the date indicated below.

Dic A. Gould

Date

le-13-2016

No Legalization Required

DMS 4006977-1

Docket No.: 68890.247983.329.US.U1

## · PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

WHEREAS, Nicholas W. Rydberg, a citizen of the United States, residing in Oakdale, Minnesota:

hereafter referred to as "THE UNDERSIGNED", has made an invention entitled ROTATIONAL SYSTEMS COMPRISING A POLYMER DRIVESHAFT, flied May 31, 2016 and assigned serial number 15/168881:

AND, WHEREAS, Cardiovascular Systems, Inc., hereafter referred to as ASSIGNEE, a corporation organized under the laws of Delaware and whose place of business and business address is 1225 Old Highway 8 NW, New Brighton, Minnesota 55112, is desirous of acquiring the entire right, title and interest in the same:

NOW, THEREFORE in consideration of the sum of One Dollar, the receipt whereof is acknowledged, and other good and valuable consideration. THE UNDERSIGNED hereby sells, assigns and transfers unto ASSIGNEE the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to all divisionals, continuations, continuations in part, reissues, reexaminations or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extension of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said invention including an assignment of all rights under the provision of international conventions and all Letters Patent of foreign countries which may be granted therefrom; the UNDERSIGNED hereby authorizes the Commissioner of Patents to Issue any and all United States Letters Patent for the aforesaid invention to ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED, hereby agrees that THE UNDERSIGNED, his/her executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

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IN TESTIMONY WHEREOF, THE UNDERSIGNED has hereunto set his/her hand on the date indicated below.

No Legalization Required

DMS 4140866v1

RECORDED: 07/22/2016