505338747 02/21/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5385528

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DAVID DESOUZA	09/06/2017
DANIEL J. RUBERY	08/09/2017
DENNIS M. TREU	08/02/2017
MARK T. WYETH	07/20/2017
JEROME JAMES	08/03/2017
GARRETT D. CASEY	08/02/2017
JAMES M. BRUGGER	08/02/2017
WILLIAM J. SCHNELL	08/02/2017
JEFFREY H. BURBANK	08/02/2017
GOETZ FRIEDERICHS	08/03/2017

RECEIVING PARTY DATA

Name:	NXSTAGE MEDICAL, INC.
Street Address:	350 MERRIMACK STREET
City:	LAWRENCE
State/Country:	MASSACHUSETTS
Postal Code:	01843

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16317903

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: 301-337-7153

Email: hmoore@potomaclaw.com, patents@potomaclaw.com

Correspondent Name: POTOMAC LAW GROUP, PLLC **Address Line 1:** 8229 BOONE BOULEVARD

Address Line 2: SUITE 430

Address Line 4: TYSONS CORNER, VIRGINIA 22182

ATTORNEY DOCKET NUMBER: 1453-0146US01

505338747 REEL: 048394 FRAME: 0029

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NAME OF SUBMITTER:	HEATHER M. MOORE	
SIGNATURE:	/Heather M. Moore/	
DATE SIGNED:	02/21/2019	
Total Attachments: 20		
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PATENT REEL: 048394 FRAME: 0030

WHEREAS, I/We David DESOUZA, Daniel J. RUBERY, Dennis M. TREU, Mark T. WYETH, Jerome JAMES, Garrett S. CASEY, James M. BRUGGER, William J. SCHNELL, Jeffrey H. BURBANK, and Goetz FRIEDERICHS, have made an invention entitled "Flow Balancing Devices, Methods, and Systems" for which I/We have filed an international patent application under the Patent Cooperation Treaty (PCT) on July 18, 2017 under Application No. PCT/US2017/042683, which claims priority to U.S. Provisional Application Nos. 62/363,394 filed on July 18, 2016 and 62/524,518 filed June 24, 2017; and

WHEREAS, NxStage Medical, Inc. ("ASSIGNEE"), a corporation or other business entity organized under the laws of Massachusetts, and whose postal address is 350 Merrimack Street, Lawrence, MA 01843, desires to acquire the entire right, title, and interest in and to the invention, the application, and any Letters Patent to be granted for the invention in the United States and in all foreign countries;

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AND I/We covenant and agree that I/We have the full right to convey the entire right, title, and interest herein assigned and that I/We have not executed and will not execute any assignment or other instrument in conflict with this Assignment;

100	
Signature:	Signature:
Date: Sep / 6 / 20/2	Date:
Full Name: David DESOUZA	Full Name: Daniel J. RUBERY
Signature	Signature:
Date:	Date:
Full Name: Dennis M. TREU	Full Name: Mark T. WYETH
Signature:	Signature:
Date:	Date:
Full Name: Jerome JAMES	Full Name: Garrett S. CASEY
Signature:	Signature:
Date;	Date:
Full Name: James M. BRUGGER	Full Name: William J. SCHNELL
Signature:	Signature:
Date:	Date:
Full Name: Jeffrey H. BURBANK	Full Name: Goetz FRIEDERICHS

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Signature:	Signature: DAIB 2
Date:	Date: 7017-08-09
Full Name: David DESOUZA	Full Name: Daniel J. RUBERY
Signature:	Signature:
Date:	Date:
Full Name: Dennis M. TREU	Full Name: Mark T. WYETH
Signature:	Signature:
Date:	Date:
Full Name: Jerome JAMES	Full Name: Garrett S. CASEY
Signature:	Signature:
Date:	Date:
Full Name: James M. BRUGGER	Full Name: William J. SCHNELL
Signature:	Signature:
Date:	Date:
Full Name: Jeffrey H. BURBANK	Full Name: Goetz FRIEDERICHS

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Date:	Date:
Full Name: David DESOUZA	Full Name: Daniel J. RUBERY
Signature: Date: Full Name: Dennis M. TREU	Signature: Date: Full Name: Mark T. WYETH
Full Name. Dennis W. TREU	Pull Name. Mark 1. W 12111
Signature: Date:	Signature: Date:
Full Name: Jerome JAMES	Full Name: Garrett S. CASEY
Signature:	Signature
Date;	Date:
Full Name: James M. BRUGGER	Full Name: William J. SCHNELL
Signature:	Signature:
Date:	Date:
Full Name: Jeffrey H. BURBANK	Full Name: Goetz FRIEDERICHS

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Signature:	Signature:
Date:	Date:
Full Name: David DESOUZA	Full Name: Daniel J. RUBERY
Signature:	Signature:
Date:	Date: July 20, 2017
Full Name: Dennis M. TREU	Full Name: Mark T. WYETH
Signature: Date:	Signature: Date:
Full Name: Jerome JAMES	Full Name: Garrett S. CASEY
Signature:	Signature:
Date:	Date:
Full Name: James M. BRUGGER	Full Name: William J. SCHNELL
Signature:	Signature:
Date:	Date:
Full Name: Jeffrey H. BURBANK	Full Name: Goetz FRIEDERICHS

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Full Name: David DESOUZA	Full Name: Daniel J. RUBERY
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Date:	Date:
Full Name: Dennis M. TREU	Full Name: Mark T. WYETH
Signature: XxxXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Signature:
Date: \$\begin{align*} 3\sqrt{3}\sqrt{7} \\ \end{align*}	Date:
Full Name: Jerome JAMES	Full Name: Garrett S. CASEY
Signature:	Signature:
Date:	Date:
Full Name: James M. BRUGGER	Full Name: William J. SCHNELL
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IN WITNESS WHEREOF, I/We have executed this Assignment on the date(s) indicated below.

Signature:	Signature
Date:	Date:
Full Name: David DESOUZA	Full Name: Daniel J. RUBERY
Signature:	Signature
Date:	Date:
Full Name: Dennis M. TREU	Full Name: Mark T. WYETH
Signature:	Signature &
Date:	Date: 8 2 19
Full Name: Jerome JAMES	Full Name: Garrott S. CASEY Garrett D. Cases
Signature:	Signature
Date:	Date:
Full Name: James M. BRUGGER	Full Name: William J. SCHNELL
Signature:	Signature
Date:	Date:
Full Name: Jeffrey H. BURBANK	Full Name: Goetz FRIEDERICHS

PATENT

REEL: 048394 FRAME: 0042

WHEREAS, I/We David DESOUZA, Daniel J. RUBERY, Dennis M. TREU, Mark T. WYETH, Jerome JAMES, Garrett S. CASEY, James M. BRUGGER, William J. SCHNELL, Jeffrey H. BURBANK, and Goetz FRIEDERICHS, have made an invention entitled "Flow Balancing Devices, Methods, and Systems" for which I/We have filed an international patent application under the Patent Cooperation Treaty (PCT) on July 18, 2017 under Application No. PCT/US2017/042683, which claims priority to U.S. Provisional Application Nos. 62/363,394 filed on July 18, 2016 and 62/524,518 filed June 24, 2017; and

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Full Name: Dennis M. TREU	Full Name: Mark T. WYETH
Signature:	Signature:
Date:	Date:
Full Name: Jerome JAMES	Full Name: Garrett S. CASEY
Signature: Xaues WIY	Signature:
Date: (02-Aug-2014)	Date
Full Name: James M. BRUGGER	Full Name: William J. SCHNELL
Signature:	Signature:
Date:	Date:
Full Name: Joffrey H BURRANK	Full Name: Goatz EDIEDEDICUS

WJS 8/2/17

Attorney Docket No. 1453-0146WO01

Assignment

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Date:		Date:
Full Name:	David DESOUZA	Full Name: Daniel J. RUBERY
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Date:		Date:
Full Name:	Dennis M. TREU	Full Name: Mark T. WYETH
Signature:		Signature:
Date:		Date:
Full Name:	Jerome JAMES	Full Name: Garrett S. CASEY
Signature:		Signature Feld Leben C
Date:		Date: 2 August 2017
Full Name:	James M. BRUGGER	Full Name: William J. SCHNELL
	· · · · · · · · · · · · · · · · · · ·	
Signature:		Signature:
Date;		Date:
Full Nama	Joffrey H. DUDDANIK	Full Name: Goetz FRIFDFRICHS

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Signature: WAAAAA	Signature:
Date: 7/2//	Date:
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WHEREAS, I/We <u>David DESOUZA</u>, <u>Daniel J. RUBERY</u>, <u>Dennis M. TREU, Mark T. WYETH</u>, Jerome JAMES, Garrett S. CASEY, James M. BRUGGER, William J. SCHNELL, <u>Jeffrey H. BURBANK</u>, and <u>Goetz FRIEDERICHS</u>, have made an invention entitled "<u>Flow Balancing Devices</u>, <u>Methods</u>, and <u>Systems</u>" for which I/We have filed an international patent application under the Patent Cooperation Treaty (PCT) on <u>July 18</u>, 2017 under Application No. <u>PCT/US2017/042683</u>, which claims priority to U.S. Provisional Application Nos. 62/363,394 filed on July 18, 2016 and 62/524,518 filed June 24, 2017; and

WHEREAS, NxStage Medical, Inc. ("ASSIGNEE"), a corporation or other business entity organized under the laws of Massachusetts, and whose postal address is 350 Merrimack Street, Lawrence, MA 01843, desires to acquire the entire right, title, and interest in and to the invention, the application, and any Letters Patent to be granted for the invention in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to me/us by ASSIGNEE, and other good and valuable consideration, the receipt and sufficiency of which I/We acknowledge, I/We, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the invention, the application, all applications claiming benefit of the application, including, but not limited to, all divisions and continuations of the application, and all Letters Patent that may be granted thereon in the United States and in all foreign countries, and all reissues thereof, together with the right to claim priority under the International Convention in all member countries; and I/We authorize and request the Director of the United States Patent and Trademark Office to issue all Letters Patent for the invention to ASSIGNEE, its successors, legal representatives, and assigns in accordance with the terms of this Assignment;

AND I/We covenant and agree that I/We have the full right to convey the entire right, title, and interest herein assigned and that I/We have not executed and will not execute any assignment or other instrument in conflict with this Assignment;

IN WITNESS WHEREOF, I/We have executed this Assignment on the date(s) indicated below.

Signature:	Signature:
Date:	Date:
Full Name: David DESOUZA	Full Name: Daniel J. RUBERY
Signature:	Signature:
Date:	Date:
Full Name: Dennis M. TREU	Full Name: Mark T. WYETH
Signature:	Signature:
Date:	Date:
Full Name: Jerome JAMES	Full Name: Garrett S. CASEY
Signature:	Signature:
Date:	Date:
Full Name: James M. BRUGGER	Full Name: William J. SCHNELL
Signature:	Signature:
Date:	Date: 8/3/2017-
Full Name: Jeffrey H. BURBANK	Full Name: Goetz FRIEDERICHS

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RECORDED: 02/21/2019