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| PATENT ASSIGNMENT COVER SHEET |
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Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5812295

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|---|------------------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| SCOTT JUDGE | 11/07/2019 |
| NEIL HAVRILLA | 11/07/2019 |
| NATHAN TERWILLIGER | 11/07/2019 |
| CHRISTOPHER SHAGES | 11/07/2019 |
| A.K. NECIOGLU | 11/07/2019 |
| RECEIVING PARTY DATA | |
| Name: | FLOWSERVE MANAGEMENT COMPANY |
| Street Address: | 5215 NORTH O'CONNOR BLVD. |
| Internal Address: | SUITE 2300 |
| City: | IRVING |
| State/Country: | TEXAS |
| Postal Code: | 75039 |
| PROPERTY NUMBERS Total: 2 | |
| Property Type | Number |
| Application Number: | 16678998 |
| Application Number: | 62758366 |
| CORRESPONDENCE DATA | |
| Fax Number: | (801)531-9168 |
| <i>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.</i> | |
| Phone: | 801-532-1922 |
| Email: | cvjohnson@traskbritt.com |
| Correspondent Name: | GREGORY C. BAKER |
| Address Line 1: | P.O. BOX 2550 |
| Address Line 4: | SALT LAKE CITY, UTAH 84110 |
| ATTORNEY DOCKET NUMBER: | 3740-14516US & 14516.1US |
| NAME OF SUBMITTER: | GREGORY C. BAKER |
| SIGNATURE: | /GREGORY C. BAKER/ |
| DATE SIGNED: | 11/08/2019 |

Total Attachments: 9

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ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, each undersigned ASSIGNOR does hereby:

SELL, ASSIGN AND TRANSFER to FLOWSERVE MANAGEMENT COMPANY ("ASSIGNEE"), a Corporation of the State of Texas, having a place of business at 5215 North O'Connor Blvd., Suite 2300, Irving, TX 75039, the entire right, title and interest for the United States and all foreign countries in and to any and all improvements that are disclosed in the **Provisional Application for United States Letters Patent** listed in the attached **Exhibit A**, such applications and all utility conversions including Patent Cooperation Treaty (PCT) applications, divisional, continuing, substitute, renewal, reissue and all other applications for patent or the legal equivalent thereof that have been or may be filed in the United States and all foreign countries relating to any of such improvements; all original, reexamined and reissued patents that have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application;

AUTHORIZE the ASSIGNEE to apply for and receive any and all United States and foreign patents relating to such improvements in its own name;

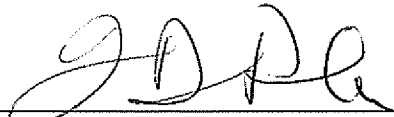
AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to and in the name of the ASSIGNEE;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement or encumbrance affecting the rights and property herein conveyed has been or will be made or entered into by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the ASSIGNEE, to carry out in good faith the intent and purpose of this Assignment, to execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications relating to any and all such improvements; to execute all rightful oaths, declarations, assignments, powers of attorney and other papers; to communicate to the ASSIGNEE all facts and provide to the ASSIGNEE all documents and things known and accessible to the undersigned relating to such improvements and the history thereof, and testify as to the same in any interference, litigation or other proceeding relating thereto; and generally to do everything possible that the ASSIGNEE shall consider desirable for vesting title to such improvements in the ASSIGNEE, and to secure, maintain, defend and enforce valid and enforceable patent protection for such improvements;

AGREE AND ACKNOWLEDGE that the SALE, ASSIGNMENT AND TRANSFER of rights and property set forth herein is and shall be IRREVOCABLE and BINDING upon the heirs, assigns, representatives and successors of each undersigned ASSIGNOR and EXTEND to the successors, assigns and nominees of the ASSIGNEE.

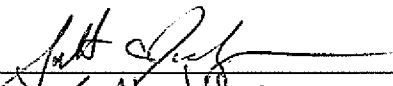
ASSIGNOR(S):



Zach Procita
Residing at: 1726 BEACON LANE, Irving, TX
WARRINGTON PA 18976

Date: 11/7/2019

Witness for Zach Procita

Signature 

Printed Name Scott Judge

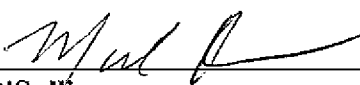
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Date: _____
Jason Bandi
Residing at: _____, Irving, TX

Witness for Jason Bandi

Signature _____
Printed Name _____

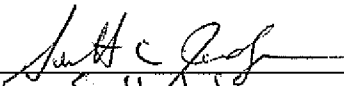
Date: _____



Mark O'Sullivan
Residing at: 518 BARCLAYMORES ST, Irving, TX
PHILIPSBURG, NJ 08865

Date: 11/7/2019

Witness for Mark O'Sullivan

Signature 

Printed Name Scott Judge

Date: 11/7/19

A. Dreiss

Date: 11-07-2019

Andreas Dreiss
Residing at: Himmelstrasse 2, Hamburg 22299 GERMANY

Witness for Andreas Dreiss

Signature _____
Printed Name _____

Date: _____

Scott Judge
Residing at: _____, Irving, TX

Date: _____

Witness for Scott Judge

Signature _____
Printed Name _____

Date: _____

Christopher Shages
Residing at: _____, Irving, TX

Date: _____

Witness for Christopher Shages

Signature _____
Printed Name _____

Date: _____

.....
Andreas Dreiss
Residing at: Ulmenstrasse 6B, Hamburg 22299 GERMANY

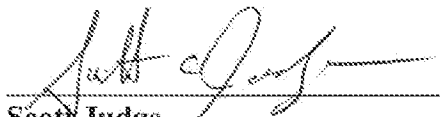
Date:

Witness for Andreas Dreiss

Signature

Date:

Printed Name

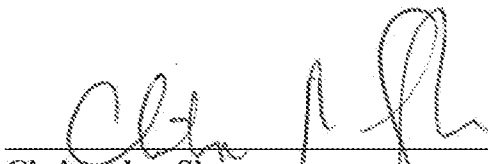

.....
Scott Judge
Residing at: 3078 Glendon Rd Irving, TX
Bethlehem, PA 18017

Date: 11/7/19

Witness for Scott Judge

Signature Neil Hovilla
.....
Printed Name Neil Hovilla

Date: 11/7/19


.....
Christopher Shages
Residing at: 5435 BATES AVE Irving, TX
BETHLEHEM, PA
18017

Date: 11/7/2019

Witness for Christopher Shages

Signature Scott Judge
.....
Printed Name Scott Judge

Date: 11/7/19

Tom Knochenbauer

Date: Nov. 7, 2019

Tom Knochenbauer
Residing at: 812 INSPIRATION LN, Irving, TX
ESC, CA 92025

Witness for Tom Knochenbauer

Signature [Signature]
Printed Name James Jauceman

Date: 11-7-19

Nathan Terwilliger

Date: Nov. 7, 2019

Nathan Terwilliger
Residing at: 1623 Finches Garden Rd, Irving, TX
Bethlehem, PA 18016

Witness for Nathan Terwilliger

Signature [Signature]
Printed Name Scott Judge

Date: 11/7/19

A.K. Necioglu

Date: 11/7/2019

A.K. Necioglu
Residing at: 7156 Tuscany Dr, Maitland, Irving, TX
PA 18062

Witness for A.K. Necioglu

Signature [Signature]
Printed Name Scott Judge

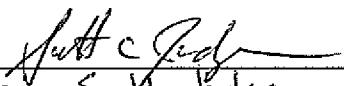
Date: 11/7/19

Cinnamon Christian

Date: 11/7/19

Cinnamon Christian
Residing at: 217 Becker Rd
North Wales, PA 19454

Witness for Cinnamon Christian

Signature 
Printed Name Scott Judge

Date: 11/7/19

Tim Nitz
Residing at: _____

Date: _____

Witness for Tim Nitz

Signature _____
Printed Name _____

Date: _____

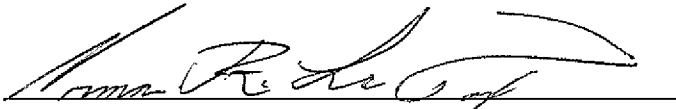
Stephen Schappert
Residing at: _____

Date: _____

Witness for Stephen Schappert

Signature _____
Printed Name _____

Date: _____




Date: 11/7/2019

Norman R. Le Doux Jr.

Residing at: 5273 Blue Sky Dr., Irving, TX
Orefield PA. 18069

Witness for Norman R. Le Doux Jr.

Signature 
Printed Name Scott Judge

Date: 11/7/19




Date: 11-7-19

Neil Havrilla

Residing at: 2559 Black Forest Dr., Irving, TX
Coplay PA 18037

Witness for Neil Havrilla

Signature 
Printed Name Scott Judge

Date: 11/7/19

Date: _____

David Olexson

Residing at: _____, Irving, TX

Witness for David Olexson

Signature _____
Printed Name _____

Date: _____

EXHIBIT A

| Title | Application No. | Filing Date | TraskBritt Ref. | Client Ref. |
|---|------------------------|--------------------|------------------------|---|
| FLUID EXCHANGE DEVICES AND RELATED CONTROLS, SYSTEMS, AND METHODS | 62/758,327 | 11/09/2018 | 3740-P14484US | H8126 (DWEER FRAC SYSTEM) |
| VALVES INCLUDING ONE OR MORE FLUSHING FEATURES AND RELATED ASSEMBLIES, SYSTEMS, AND METHODS | 62/758,340 | 11/09/2018 | 3740-P14485US | H8126 (SELF FLUSHING CHECK VALVE) |
| FLUID EXCHANGE DEVICES AND RELATED CONTROLS, SYSTEMS, AND METHODS | 62/758,346 | 11/09/2018 | 3740-P14487US | H8126 (4WAY DYNAMICALLY-SEALED VALVE) |
| FLUID EXCHANGE DEVICES AND RELATED SYSTEMS, AND METHODS | 62/758,359 | 11/09/2018 | 3740-P14488US | H8126 (LINXVALVE ACTUATOR AND GEOMETRY CONTROL) |
| FLUID EXCHANGE DEVICES AND RELATED CONTROLS, SYSTEMS, AND METHODS | 62/758,366 | 11/09/2018 | 3740-P14516US | H8126 (ACTUATOR CONTROL WITH SYSTEM FEEDBACK) |

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|---|------------|------------|---------------|-------------------------------------|
| PISTONS FOR USE IN FLUID EXCHANGE DEVICES AND RELATED DEVICES, SYSTEMS, AND METHODS | 62/758,373 | 11/09/2018 | 3740-P14537US | H8126 (SEPARATOR PISTON IDAF) |
|---|------------|------------|---------------|-------------------------------------|