

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5588071

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MARK W. MCBRIDE	10/18/2005
THOMAS M. MALLISON	10/17/2005
GREGORY DILLON	10/18/2005
ROBERT L. CAMPBELL	10/17/2005
DAVID BOGER	10/11/2005
JUSTIN M. WALSH	11/14/2007
JAMES P. RUNT	11/14/2007
ROBERT F. KUNZ	11/06/2007
STEPHEN A. HAMBRIC	11/08/2007
RECEIVING PARTY DATA	
Name:	THE PENN STATE RESEARCH FOUNDATION
Street Address:	304 OLD MAIN
City:	UNIVERSITY PARK
State/Country:	PENNSYLVANIA
Postal Code:	16803
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16254184
CORRESPONDENCE DATA	
Fax Number:	(314)612-2307
<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:	314-621-5070
Email:	uspatents@armstrongteasdale.com
Correspondent Name:	PATENT DOCKET DEPARTMENT
Address Line 1:	ARMSTRONG TEASDALE LLP
Address Line 2:	7700 FORSYTH BLVD., SUITE 1800
Address Line 4:	ST. LOUIS, MISSOURI 63105
ATTORNEY DOCKET NUMBER:	P04000USC5
NAME OF SUBMITTER:	ALESIA MARRA

PATENT

SIGNATURE:	/Alesia Marra/
DATE SIGNED:	06/24/2019
Total Attachments: 6 source=Pages from penn state-31380153-33044907#page1.tif source=Pages from penn state-31380153-33044907#page2.tif source=Pages from penn state-31380153-33044907#page3.tif source=Pages from penn state-31380153-33044907#page4.tif source=Pages from penn state-31380153-33044907#page5.tif source=Pages from penn state-31380153-33044907#page6.tif	

Assignment of Rights, Title and Interest in Invention
(Multiple inventors; single assignee)

Docket No.
PST-16002/36

This is an Assignment of the following rights, title and interest: (check all that apply):

- ☒ *United States of America rights, title and interest in the invention*
- ☒ *Foreign rights, title and interest in the invention*
- ☒ *United States Patent Application Serial No. 11/227,277*

Date of Execution: _____ *Date of Filing:* Sept. 15, 2005

- ☐ *United States Provisional Patent Application Serial No.* _____
- ☐ *United States Patent No(s).* _____
- ☐ *International (PCT) Patent Application Serial No.* _____
- ☐ *Other (specify)* _____

Title of the Invention

EXPANDABLE IMPELLER PUMP

Inventors (assignors)

<i>Name</i>	<i>Address</i>
Mark W. McBride	194 N. Fillmore, Bellefonte, PA 16823
Thomas M. Mallison	1836 Kings Ct., State College, PA 16803
Gregory Dillon	308 Toftrees Ave., #131, State College, PA 16803
Robert L. Campbell	225 Amblerwood Way, State College, PA 16803
David Boger	217 Runnymede Ave., Jenkintown, PA 19046

Assignee

<i>Name</i>	<i>Address</i>
The Penn State Research Foundation	304 Old Main University Park, PA 16803

11/05/2007 14:19 IFAX 1P0@PSU.EDU

Aimee Crihfield 012/012

former PTO/SB/15 (8-00) Modified LDK&M

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional) DSCOPE 3.0-039
--	---

Whereas, I, Justin M. Walsh of
2607 General Potter Highway, Spring Mills, Pennsylvania 16875
 hereafter referred to as assignor, have with others invented certain new and useful improvements in
EXPANDABLE IMPELLER PUMP

☒ for which an application for a United States Letters Patent was filed on September 15, 2005
 Application Number 11/227,277

☐ for which an application for a United States Letters Patent was executed by me on _____
 and _____

Whereas, The Penn State Research Foundation
 a corporation of _____ herein referred to as "assignee" whose mailing address is
304 Old Main, University Park, Pennsylvania 16803
 is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00), the receipt whereof
 is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said
 assignee my entire right, title and interest for the United States of America and all other countries in and to said
 invention and the aforesaid utility patent application and all original, divisional, continuation, continuation-in-part,
 substitute or reissue applications and patents applied for or granted therefor in the United States of America and all
 other countries, for said invention, including without limitation all applications and patents for said invention claiming
 priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including the right to claim such
 priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all
 patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest
 therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant
 without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications
 for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate
 to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever
 requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may
 become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid
 assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the
 expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application
 when known.

11/14/2007 (Date) Justin M. Walsh (Signature)

State of Pennsylvania) SS:
 County of Centre)

On this 14th day of November, 2007 before me personally came the above-named Justin M. Walsh,
 to me personally known as the individual who executed the foregoing instrument, who acknowledged to me
 that the same was executed by him/her of his/her own free will for the purposes therein set forth.

Ruth A. Harpster
 (Notary Public)

Notarial Seal
 Ruth A. Harpster, Notary Public
 State College Boro, Centre County
 My Commission Expires July 10, 2011

☒ *Total of 5 forms are submitted. Pennsylvania Association of Notaries

LD-828A

817895_1.DOC

11/05/2007 14:19 IFAX IPO@PSU.EDU

James Criffield 009/012

former PTO/SB/18 (8-02) Modified LDKMM

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional) DScope 3.0-039
--	---

Whereas, I, James P. Runt of
338 Arbor Way, State College, Pennsylvania 16803
 hereafter referred to as assignor, have with others invented certain new and useful improvements in
EXPANDABLE IMPELLER PUMP

☒ for which an application for a United States Letters Patent was filed on September 15, 2005
 Application Number 11/227,277

☐ for which an application for a United States Letters Patent was executed by me on _____
 and _____

Whereas, The Penn State Research Foundation
 a corporation of _____ herein referred to as "assignee" whose mailing address is
304 Old Main, University Park, Pennsylvania 16803
 is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00), the receipt whereof
 is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said
 assignee my entire right, title and interest for the United States of America and all other countries in and to said
 invention and the aforesaid utility patent application and all original, divisional, continuation, continuation-in-part,
 substitute or reissue applications and patents applied for or granted therefor in the United States of America and all
 other countries, for said invention, including without limitation all applications and patents for said invention claiming
 priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including the right to claim such
 priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all
 patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest
 therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant
 without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications
 for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate
 to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever
 requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may
 become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid
 assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the
 expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application
 when known.

11/14/07 (Date) [Signature] (Signature)

State of PA) SS: 166444489
 County of CENTRE)

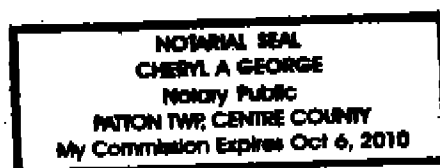
On this 14 day of November 2007 before me personally came the above-named James P. Runt
Runt, to me personally known as the individual who executed the foregoing instrument, who acknowledged to me that
 the same was executed by him/her of his/her own free will for the purposes therein set forth.

Cheryl A. George
 (Notary Public)

☒ Total of 5 forms are submitted.

LD-528\

317895_1.DOC



PATENT
REEL: 049520 FRAME: 00205

11/05/2007 14:16 IFAX IPO@PSU.EDU

→ Aimee Cribfield 006/012

712 McKee Street,

Former PTO/SB/15 (8-00) Modified LDK/AM

ASSIGNMENT OF UTILITY APPLICATION

Docket Number (Optional)

DScope 3.0-039

Whereas, I, Robert F. Kunz of
~~Robert F. Kunz~~ State College, Pennsylvania 16803

hereafter referred to as assignor, have with others invented certain new and useful improvements in

EXPANDABLE IMPELLER PUMP

☒ for which an application for a United States Letters Patent was filed on September 15, 2005
 Application Number 11/227,277

☐ for which an application for a United States Letters Patent was executed by me on _____
 and

Whereas, The Penn State Research Foundation
 a corporation of _____ herein referred to as "assignee" whose mailing address is
304 Old Main, University Park, Pennsylvania 16803

is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.

11/6/07
 (Date)

(Signature)

State of Pennsylvania) ss:
 County of Centre)

On this 7th day of November 2007 before me personally came the above-named Robert F. Kunz, to me personally known as the individual who executed the foregoing instrument, who acknowledged to me that the same was executed by him/her of his/her own free will for the purposes herein set forth.

Barbara S. Barnett
 (Notary Public)

NOTARIAL SEAL
 Barbara S. Barnett, Notary Public
 Ferguson Twp, Centre County
 My commission expires Mar 24, 2011

☒ Total of 5 forms are submitted.

LD-5281

817895_1.DOC

former PTO/SB/15 (8-00) Modified LDLK&M

ASSIGNMENT OF UTILITY APPLICATION

Docket Number (Optional)

DScope 3.0-039

Whereas, I, Stephen A. Hambric of
520 McKee Street; State College, Pennsylvania 16803

hereafter referred to as assignor, have with others invented certain new and useful improvements in
EXPANDABLE IMPELLER PUMP

☒ for which an application for a United States Letters Patent was filed on September 15, 2005

Application Number 11/227,277

☐ for which an application for a United States Letters Patent was executed by me on _____
 and _____

Whereas, The Penn State Research Foundation

a corporation of _____ herein referred to as "assignee" whose mailing address is

304 Old Main, University Park, Pennsylvania 16803

is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.

11/8/07

(Date)

Stephen A. Hambric

(Signature)

State of Pennsylvania) SS:
 County of Centre)

On this 8th day of November, 2007 before me personally came the above-named Stephen A. Hambric, to me personally known as the individual who executed the foregoing instrument, who acknowledged to me that the same was executed by him/her of his/her own free will for the purposes therein set forth.

Ruth A. Harpster
 (Notary Public)

Notarial Seal
 Ruth A. Harpster, Notary Public
 State College Boro, Centre County
 My Commission Expires July 10, 2011

Pennsylvania Association of Notaries

☒ *Total of 5 forms are submitted.

LD-528

PATENT

RECORDED: 06/24/2019

REEL: 049520 FRAME: 02507