

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3933117

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MARK W. MCBRIDE	11/09/2007
DAVID A. BOGER	05/23/2007
ROBERT L. CAMPBELL	05/31/2007
GREGORY P. DILLON	05/29/2007
STEPHEN A. HAMBRIC	11/20/2007
ROBERT F. KUNZ	09/13/2007
THOMAS M. MALLISON	05/31/2007
JAMES P. RUNT	05/23/2007
JUSTIN M. WALSH	05/31/2007
RECEIVING PARTY DATA	
Name:	THE PENN STATE RESEARCH FOUNDATION
Street Address:	304 OLD MAIN
City:	UNIVERSITY PARK
State/Country:	PENNSYLVANIA
Postal Code:	16802
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15176620
CORRESPONDENCE DATA	
Fax Number:	(949)760-9502
<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:	9497600404
Email:	efiling@knobbe.com
Correspondent Name:	KNOBBE, MARTENS, OLSON & BEAR LLP
Address Line 1:	2040 MAIN STREET
Address Line 2:	14TH FLOOR
Address Line 4:	IRVINE, CALIFORNIA 92614
ATTORNEY DOCKET NUMBER:	THOR.034C3
NAME OF SUBMITTER:	PAUL STELLMAN

PATENT

SIGNATURE:	/Paul Stellman/
DATE SIGNED:	06/23/2016
Total Attachments: 9 source=2016-06-23_Assignment (Inventors to PSU)_THOR.034C3#page1.tif source=2016-06-23_Assignment (Inventors to PSU)_THOR.034C3#page2.tif source=2016-06-23_Assignment (Inventors to PSU)_THOR.034C3#page3.tif source=2016-06-23_Assignment (Inventors to PSU)_THOR.034C3#page4.tif source=2016-06-23_Assignment (Inventors to PSU)_THOR.034C3#page5.tif source=2016-06-23_Assignment (Inventors to PSU)_THOR.034C3#page6.tif source=2016-06-23_Assignment (Inventors to PSU)_THOR.034C3#page7.tif source=2016-06-23_Assignment (Inventors to PSU)_THOR.034C3#page8.tif source=2016-06-23_Assignment (Inventors to PSU)_THOR.034C3#page9.tif	

ASSIGNMENT OF UTILITY APPLICATION

Docket Number (Optional)

DScope 3.0-040

Whereas, I, Mark W. McBride of
194 N. Fillmore Road; Bellefonte, Pennsylvania 16823

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

☒ for which an application for a United States Letters Patent was filed on March 23, 2007
 Application Number 11/728,051

☐ 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 16802

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.

9 Nov 2007
 (Date)

Mark W. McBride
 (Signature)

State of Pennsylvania) SS:
 County of Centre)

On this 9th day of November, 2007 before me personally came the above-named Mark W. McBride, 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 hereon 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 9 forms are submitted. Pennsylvania Association of Notaries

LD-528A

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional) DSCOPE 3.0-040
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Whereas, I, David A. Boger of
2048 Pleasant Avenue; Glenside, Pennsylvania 19038
hereafter referred to as assignor, have with others invented certain new and useful improvements in
HEART ASSIST DEVICE WITH EXPANDABLE IMPELLER PUMP
☒ for which an application for a United States Letters Patent was filed on March 23, 2007
Application Number 11/728,051
☐ 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 16802
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.

May 23 2007 (Date) [Signature] (Signature)

State of Pennsylvania) SS:
County of Montgomery)

On this 23 day of May, 2007 before me personally came the above-named David A. Boger, 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.

Madeline Soto
(Notary Public)

NOTARIAL SEAL
MADELINE SOTO, Notary Public
Warminster Twp., Bucks County
My Commission Expires June 11, 2009

<input checked="" type="checkbox"/>	Total of <u>9</u> forms are submitted.
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LD-528

ASSIGNMENT OF UTILITY APPLICATION

Docket Number (Optional)

DScope 3.0-040

Whereas, I, Robert L. Campbell of
225 Amblerwood Way, State College, Pennsylvania 16803

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

☒ for which an application for a United States Letters Patent was filed on March 23, 2007
 Application Number 11/728,051

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

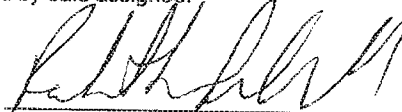
Whereas, The Penn State Research Foundation
 a corporation of herein referred to as "assignee" whose mailing address is
304 Old Main; University Park, Pennsylvania 16802

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.

5/31/2007

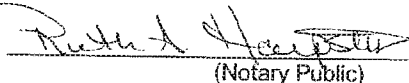
(Date)



(Signature)

State of Pennsylvania) SS:
 County of Centre)

On this 31st day of May, 2007 before me personally came the above-named Robert L. Campbell, 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.


 (Notary Public)

Notarial Seal
 Ruth A. Harpster, Notary Public
 College Twp., Centre County
 My Commission Expires July 10, 2007

☒ *Total of 9 forms are submitted.

LD-528

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional) DSCOPE 3.0-040
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Whereas, I, Gregory P. Dillon of
308 Toftrees Ave., #131; State College, Pennsylvania 16803
hereafter referred to as assignor, have with others invented certain new and useful improvements in
HEART ASSIST DEVICE WITH EXPANDABLE IMPELLER PUMP
☒ for which an application for a United States Letters Patent was filed on March 23, 2007
Application Number 11/728,051
☐ 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 16802
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.

5-29-2007 (Date) Greg Dillon (Signature)

State of Pennsylvania) SS:
County of Centre)

On this 29th day of May, 2007 before me personally came the above-named Gregory P. Dillon, 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.

Caryl J. Fisher (Notary Public)
Caryl J. Fisher, Notary Public
State College Boro. Centre County
My Commission Expires August 10, 2009

☒ *Total of 9 forms are submitted.

LD-528

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional) DSCOPE 3.0-040
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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 HEART ASSIST DEVICE WITH EXPANDABLE IMPELLER PUMP

☒ for which an application for a United States Letters Patent was filed on March 23, 2007
Application Number 11/728,051

☐ 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 16802 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.

11/20/2007 (Date) SA Hambric (Signature)

State of Pennsylvania) SS:
County of Centre)

On this 20th 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

☒ Total of 9 forms are submitted. Pennsylvania Association of Notaries

LD-5281

ASSIGNMENT OF UTILITY APPLICATION	<small>former PTO/SB/15 (8-00) Modified LDK&M</small> Docket Number (Optional) DSCOPE 3.0-040
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Whereas, I, Robert F. Kunz of
306 Ridge Avenue; State College, Pennsylvania 16803
 hereafter referred to as assignor, have with others invented certain new and useful improvements in
HEART ASSIST DEVICE WITH EXPANDABLE IMPELLER PUMP
☒ for which an application for a United States Letters Patent was filed on March 23, 2007
 Application Number 11/728,051
☐ 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 16802
 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.

9/13/07 (Date) [Signature] (Signature)

State of Pennsylvania, ss:
 County of Centre

On this 13th day of September 2007
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 therein set forth.

Barbara J. Barnett
 (Notary Public)

COMMONWEALTH OF PENNSYLVANIA
 NOTARIAL SEAL
 Barbara J. Barnett, Notary Public
 Pennsua Twp, Centre County
 My Commission Expires Mar 24, 2011

☒ Total of 9 forms are submitted.

LD-528

PATENT

REEL: 038998 FRAME: 0890

ASSIGNMENT OF UTILITY APPLICATION

Docket Number (Optional)

DScope 3.0-040

Whereas, I, Thomas M. Mallison of
1836 Kings Court; State College, Pennsylvania 16801

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

HEART ASSIST DEVICE WITH EXPANDABLE IMPELLER PUMP

☒ for which an application for a United States Letters Patent was filed on March 23, 2007

Application Number 11/728,051

☐ 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 16802

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.

31 May 2007

(Date)

[Signature]

(Signature)

State of Pennsylvania) SS:
 County of Centre)

On this 31st day of May, 2007 before me personally came the above-named Thomas M. Mallison, 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
 College Twp., Centre County
 My Commission Expires July 10, 2007

☒ *Total of 9 forms are submitted.

ASSIGNMENT OF UTILITY APPLICATION

Docket Number (Optional)

DScope 3.0-040

Whereas, I, James P. Runt of338 Arbor Way, State College, Pennsylvania 16803

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

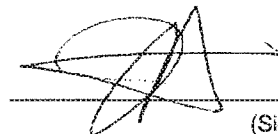
HEART ASSIST DEVICE WITH EXPANDABLE IMPELLER PUMP☒ for which an application for a United States Letters Patent was filed on March 23, 2007Application Number 11/728,051☐ for which an application for a United States Letters Patent was executed by me on _____
and _____Whereas, The Penn State Research Foundation

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

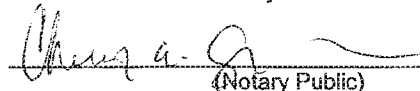
304 Old Main; University Park, Pennsylvania 16802

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

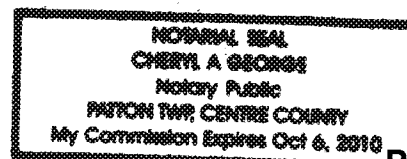
NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries 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.

5/23/07
(Date)
(Signature)State of PA) SS: 166444487
County of CENTRE)

On this _____ day of _____, _____ before me personally came the above-named James P. 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.


(Notary Public)☒ *Total of 9 forms are submitted.

LD-528\



PATENT

REEL: 038998 FRAME: 0892

ASSIGNMENT OF UTILITY APPLICATION

Docket Number (Optional)

DScope 3.0-040

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
HEART ASSIST DEVICE WITH EXPANDABLE IMPELLER PUMP

☒ for which an application for a United States Letters Patent was filed on March 23, 2007
 Application Number 11/728,051

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

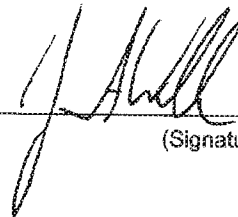
Whereas, The Penn State Research Foundation
 a corporation of herein referred to as "assignee" whose mailing address is
304 Old Main; University Park, Pennsylvania 16802

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.

5.31.2007

(Date)



(Signature)

State of Pennsylvania) SS:
 County of Centre)

On this 31st day of May, 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)

COMMONWEALTH OF PENNSYLVANIA
 Notarial Seal
 Ruth A. Harpster, Notary Public
 College Twp., Centre County
 My Commission Expires July 10, 2007

☒ *Total of 9 forms are submitted.

LD-528\

PATENT

RECORDED: 06/23/2016

REEL: 038998 FRAME: 0893