

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Robert L. Campbell</td> <td>02/08/2012</td> </tr> <tr> <td>Mark W. McBride</td> <td>02/10/2012</td> </tr> <tr> <td>Thomas M. Mallison</td> <td>03/09/2012</td> </tr> <tr> <td>Adam Roslund</td> <td>07/27/2012</td> </tr> </tbody> </table>		Name	Execution Date	Robert L. Campbell	02/08/2012	Mark W. McBride	02/10/2012	Thomas M. Mallison	03/09/2012	Adam Roslund	07/27/2012
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>The Penn State Research Foundation</td> </tr> <tr> <td>Street Address:</td> <td>304 Old Main</td> </tr> <tr> <td>City:</td> <td>University Park</td> </tr> <tr> <td>State/Country:</td> <td>PENNSYLVANIA</td> </tr> <tr> <td>Postal Code:</td> <td>16802</td> </tr> </table>		Name:	The Penn State Research Foundation	Street Address:	304 Old Main	City:	University Park	State/Country:	PENNSYLVANIA	Postal Code:	16802
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
<p>Fax Number: 9497609502</p> <p>Phone: 9497600404</p> <p>Email: sara.comwell@kmob.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Knobbe Martens, Olson, &amp; Bear LLP</p> <p>Address Line 1: 2040 Main Street</p> <p>Address Line 2: 14th Floor</p> <p>Address Line 4: Irvine, CALIFORNIA 92614</p>											
ATTORNEY DOCKET NUMBER:	THOR.047A										
NAME OF SUBMITTER:	Paul Stellman										

OP \$40.00 13343617

**Total Attachments: 6**

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## ASSIGNMENT

WHEREAS, Robert L. Campbell, a US citizen, residing in Port Matilda, PA, Mark W. McBride, a US citizen, residing in Bellefonte, PA, Thomas M. Mallison, a US citizen, residing in State College, PA and Adam Roslund, a US citizen, residing in Monroeville, PA (individuals collectively hereinafter referred to as "ASSIGNOR") invented certain new and useful improvements, technology, inventions, developments, ideas or discoveries related to IMPELLER HOUSING FOR PERCUTANEOUS HEART PUMP (collectively hereinafter referred to as the "Work") for which an application for Letters Patent in the United States has been prepared for filing (identified above) with the United States Patent and Trademark Office (hereinafter the "Application");

AND WHEREAS, THE PENN STATE RESEARCH FOUNDATION, a Pennsylvania Corporation, with its principal place of business at 304 Old Main, University Park, PA 16802 (hereinafter the "ASSIGNEE"), desires to acquire the entire right, title, and interest in and to the Application and the Work:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby acknowledges that ASSIGNOR has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in the Application and the Work, including all nonprovisional applications (including but not limited to U.S. Provisional Application No. 61/430,146, filed January 5, 2011) claiming priority thereto that have been or may hereafter be filed; such filings including, all divisions, continuations, continuations-in-part, reissues, and reexaminations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and any related Letters Patent which may hereafter be granted or filed in any country or countries foreign to the United States, all extensions, renewals and reissues thereof; and ASSIGNOR hereby authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all related Letters Patent to the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

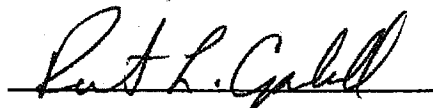
AND ASSIGNOR DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND ASSIGNOR DOES HEREBY covenant and agree that ASSIGNOR will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Work, and testify in any legal proceeding, assist in the preparation of any other provisional or non-provisional applications relating to the Application and the Work or any improvements made thereto, sign all lawful papers, execute and make all rightful oaths and/or declarations in connection with the Application and the Work including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Work in all countries.

Application No.: 13/343,617  
Filing Date: January 4, 2012

Docket Number: THOR.047A  
Page 2 of 5

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 8 day of  
February, 2012.



Robert L. Campbell

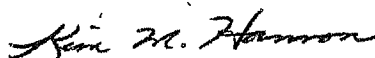
**Sign in presence of a Notary and have**

**Notary attach Acknowledgement**

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal

Kim M. Hannon, Notary Public  
State College Boro, Centre County  
My Commission Expires May 6, 2014

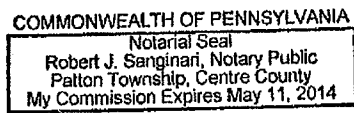


2-8-2012

Application No.: 13/343,617  
Filing Date: January 4, 2012

Docket Number: THOR.047A  
Page 3 of 5

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 10 FEB day of 2012



Mark W. McBride

**Sign in presence of a Notary and have**

**Notary attach Acknowledgement**

**INDIVIDUAL ACKNOWLEDGMENT**

State/Commonwealth of Pennsylvania }  
County of Centre } ss.

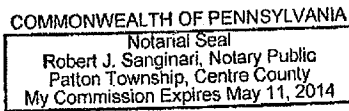
On this the 10<sup>th</sup> day of February, 2012, before  
me, Robert J. Sanginari, the undersigned Notary  
Name of Notary Public  
Public, personally appeared Mark W. McBride  
Name(s) of Signer(s)

☐ personally known to me – OR –

☒ proved to me on the basis of satisfactory  
evidence

to be the person(s) whose name(s) is/are  
subscribed to the within instrument, and  
acknowledged to me that he/she/they  
executed the same for the purposes therein  
stated.

WITNESS my hand and official seal.



Robert J. Sanginari  
Signature of Notary Public  
Robert J. Sanginari  
Other Required Information (Printed Name of Notary, Residence, etc.)

Place Notary Seal and/or Any Stamp Above

**OPTIONAL**

Although the information in this section is not required by law, it may prove valuable to  
persons relying on the document and could prevent fraudulent removal and reattachment  
of this form to another document.

**Description of Attached Document**

Title or Type of Document: Patent Application  
Document Date: 2/10/12 Number of Pages: 5  
Signer(s) Other Than Named Above: N/A

<b>Right Thumbprint of Signer</b>
Top of thumb here

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 9 day of  
March, 2012.

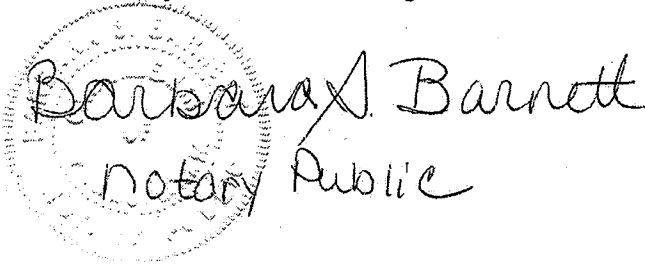
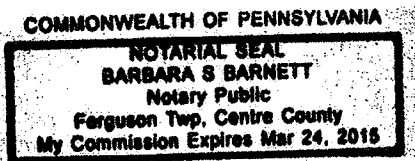


Thomas M. Mallison



Sign in presence of a Notary and have

Notary attach Acknowledgement

  
Notary Public

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 27 day of July, 2012.

Adam Roslund

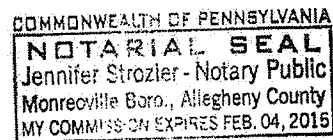
Adam Roslund

Sign in presence of a Notary and have

Notary attach Acknowledgement

STATE OF PENNSYLVANIA  
COUNTY OF ALLEGHENY  
Subscribed and sworn to before me  
this 27<sup>th</sup> day of JULY, 2012.

Jennifer Strozler



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