

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3685621

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
BRADLEY CHARLES KNIPPEL	09/05/2014
HUISUN WANG	08/21/2014
RALPH J. THOMAS	09/18/2014
JACOB JOHN DALY	09/26/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ST. JUDE MEDICAL, CARDIOLOGY DIVISION, INC.
<b>Street Address:</b>	177 EAST COUNTY ROAD B
<b>City:</b>	ST. PAUL
<b>State/Country:</b>	MINNESOTA
<b>Postal Code:</b>	55117
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14329406
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(908)654-0415
<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>	
<b>Phone:</b>	(908) 518-6356
<b>Email:</b>	assignment@lernerdavid.com
<b>Correspondent Name:</b>	LDLK&M
<b>Address Line 1:</b>	600 SOUTH AVENUE WEST
<b>Address Line 4:</b>	WESTFIELD, NEW JERSEY 07090
<b>ATTORNEY DOCKET NUMBER:</b>	STJUDE 3.0-120 DIV (E)
<b>NAME OF SUBMITTER:</b>	MELINDA C. CORMIER
<b>SIGNATURE:</b>	/Melinda C. Cormier/
<b>DATE SIGNED:</b>	01/07/2016
<b>Total Attachments: 4</b>	
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**ASSIGNMENT OF UTILITY APPLICATION**Docket Number (Optional)  
STJUDE 3.0-120 DIV (E)

Whereas, I, Bradley Charles Knippel of  
570 Chippewa Trail; Lino Lakes, Minnesota 55014

hereafter referred to as assignor, have with others invented certain new and useful improvements in  
**STAGED DEVELOPMENT DEVICES AND METHODS FOR TRANSCATHETER HEART  
VALVE DELIVERY**

☒ for which an application for a United States Letters Patent was filed on July 11, 2014  
Application Number 14/329,406

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

Whereas, St. Jude Medical, Cardiology Division, Inc.  
a corporation of Delaware herein referred to as "assignee" whose mailing address is  
177 East County Road B; St. Paul, Minnesota 55117

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.

I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 61/376,425, filed September 17, 2010, and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of said Application No. 61/376,425 pursuant to any law or treaty in the countries of the world.

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

05 SEP 2014

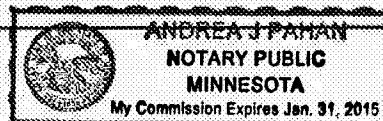
(Date)

Bradley Knippel  
(Signature)

State of Minnesota ) SS:  
County of Anoka )

On this 5th day of September 2014 before me personally came the above-named Bradley Charles Knippel, 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.

Andrea J. Pahan  
(Notary Public)



**ASSIGNMENT OF UTILITY APPLICATION**

Docket Number (Optional)

STJUDE 3.0-120 DIV (E)

Whereas, I, Huisun Wang of  
6275 Fernbrook Lane North; Maple Grove, Minnesota 55311

hereafter referred to as assignor, have with others invented certain new and useful improvements in  
**STAGED DEVELOPMENT DEVICES AND METHODS FOR TRANSCATHETER HEART  
 VALVE DELIVERY**

☒ for which an application for a United States Letters Patent was filed on July 14, 2014

Application Number 14/329,406

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

Whereas, St. Jude Medical, Cardiology Division, Inc.  
 a corporation of Delaware herein referred to as "assignee" whose mailing address is  
177 East County Road B; St. Paul, Minnesota 55117

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

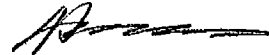
NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00 ), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries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

I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 61/376,425, filed September 17, 2010, and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of said Application No. 61/376,425 pursuant to any law or treaty in the countries of the world.

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

Aug 21, 2014

(Date)



(Signature)

State of \_\_\_\_\_ ) SS:

County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me personally came the above-named Huisun Wang, 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)

**PATENT**

**REEL: 037431 FRAME: 0246**

**ASSIGNMENT OF UTILITY APPLICATION**

Docket Number (Optional)

STJUDE 3.0-120 DIV (E)

Whereas, I, Ralph Joseph Thomas of  
7616 113 1/2 Ave N, Champlin, Minnesota 55316

hereafter referred to as assignor, have with others invented certain new and useful improvements in  
**STAGED DEVELOPMENT DEVICES AND METHODS FOR TRANSCATHETER HEART  
 VALVE DELIVERY**

☒ for which an application for a United States Letters Patent was filed on July 14, 2014

Application Number 14/329,406

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

Whereas, St. Jude Medical, Cardiology Division, Inc.  
 a corporation of Delaware herein referred to as "assignee" whose mailing address is  
177 East County Road B, St. Paul, Minnesota 55117

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.

I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 61/376,425, filed September 17, 2010, and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of said Application No. 61/376,425 pursuant to any law or treaty in the countries of the world.

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

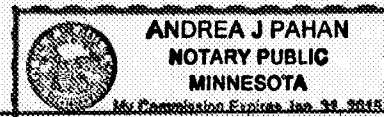
19 Sep 2014  
 (Date)

Ralph Joseph Thomas  
 (Signature)

State of Minnesota ) SS:  
 County of Anoka )

On this 18th day of September, 2014 before me personally came the above-named Ralph Joseph Thomas, 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.

Andrea J. Pahan  
 (Notary Public)



**ASSIGNMENT OF UTILITY APPLICATION**

Docket Number (Optional)

STJUDE 3.0-120 DIV (E)

Whereas, I, Jacob John Daly of  
12472 Fergus Ct. NE, Blaine, Minnesota 55449

hereafter referred to as assignor, have with others invented certain new and useful improvements in  
**STAGED DEVELOPMENT DEVICES AND METHODS FOR TRANSCATHETER HEART  
 VALVE DELIVERY**

☒ for which an application for a United States Letters Patent was filed on July 14, 2014

Application Number 14/329,406

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

Whereas, St. Jude Medical, Cardiology Division, Inc.  
 a corporation of Delaware herein referred to as "assignee" whose mailing address is  
177 East County Road B, St. Paul, Minnesota 55117

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.

I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 61/376,425, filed September 17, 2010, and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of said Application No. 61/376,425 pursuant to any law or treaty in the countries of the world.

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

26 Sept 14  
 (Date)

[Signature]  
 (Signature)

State of Minnesota, ss:  
 County of Anoka

On this 20th day of September, 2014 before me personally came the above-named Jacob John Daly, 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.

[Signature]  
 (Notary Public)

