

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT2889656

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
WILLIAM E. LAPP	01/05/2014
TODD W. SMITH	01/29/2014
ARTHUR L. BUTTERWORTH	02/07/2014
PAUL J. SIKORSKY	01/31/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	TRANE INTERNATIONAL INC.
<b>Street Address:</b>	ONE CENTENNIAL AVENUE
<b>City:</b>	PISCATAWAY
<b>State/Country:</b>	NEW JERSEY
<b>Postal Code:</b>	08855
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>PCT Number:</b>	US2014013037
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(612)455-3801
<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>	6124553800
<b>Email:</b>	rthrumston@hsml.com
<b>Correspondent Name:</b>	HAMRE, SCHUMANN, MUELLER & LARSON, P.C.
<b>Address Line 1:</b>	PO BOX 2902
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55402
<b>ATTORNEY DOCKET NUMBER:</b>	20424.0047WOU1
<b>NAME OF SUBMITTER:</b>	BRYAN A. WONG
<b>SIGNATURE:</b>	/Bryan A. Wong/
<b>DATE SIGNED:</b>	06/09/2014
<b>Total Attachments: 4</b>	
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**ASSIGNMENT**

WHEREAS, we, William E. Lapp, residing at 4727 Juniper Street, La Crosse, Wisconsin 54601; Todd W. Smith, residing at W6056 Ruth Lane, Onalaska, Wisconsin 54650; Arthur L. Butterworth, residing at N1625 Mickel Road, La Crosse, Wisconsin 54601; and Paul J. Sikorsky, residing at 4715 Dallas Avenue, Sparta, Wisconsin 54656, made certain new and useful inventions and improvements for which we filed a Patent Cooperation Treaty International Application on January 24, 2014, that has application no. PCT/US2014/013037 and which is entitled PRESSURE NITRIDED STAINLESS STEEL HYBRID BEARING FOR A REFRIGERANT LUBRICATED COMPRESSOR.

AND WHEREAS, TRANE INTERNATIONAL INC., a corporation organized and existing under and by virtue of the laws of Delaware, and having an office and place of business at One Centennial Avenue, Piscataway, New Jersey 08855 (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;


NOW THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to any applications which have been or shall be filed, including all nonprovisionals, applications filed under the Patent Cooperation Treaty, divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to


said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 5 day of  
JANUARY, 2014.

  
\_\_\_\_\_  
Inventor: William E. Lapp

IN TESTIMONY WHEREOF, I have hereunto set my hand this 29 day of  
January, 2014.

  
\_\_\_\_\_  
Inventor: Todd W. Smith

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of  
\_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Inventor: Arthur L. Butterworth

said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Inventor: William E. Lapp

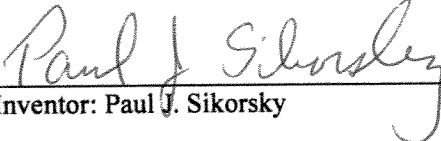
IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Inventor: Todd W. Smith

IN TESTIMONY WHEREOF, I have hereunto set my hand this 17<sup>th</sup> day of February, 2014.

Arthur L. Butterworth  
Inventor: Arthur L. Butterworth

IN TESTIMONY WHEREOF, I have hereunto set my hand this 31 day of  
January, 2014.

  
\_\_\_\_\_  
Inventor: Paul J. Sikorsky