

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4596976

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ROBERT J. ROTH	09/15/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	TRANE INTERNATIONAL INC.
<b>Street Address:</b>	800-E BEATY STREET
<b>City:</b>	DAVIDSON
<b>State/Country:</b>	NORTH CAROLINA
<b>Postal Code:</b>	28036
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15705926
<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>	612 455 3800
<b>Email:</b>	jsilbaugh@hsml.com
<b>Correspondent Name:</b>	IR HAMRE, SCHUMANN, MUELLER & LARSON, P.
<b>Address Line 1:</b>	45 SOUTH SEVENTH STREET
<b>Address Line 2:</b>	SUITE 2700
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55402-1683
<b>ATTORNEY DOCKET NUMBER:</b>	20424.0332USU1
<b>NAME OF SUBMITTER:</b>	BRYAN A. WONG
<b>SIGNATURE:</b>	/Bryan A. Wong/
<b>DATE SIGNED:</b>	09/15/2017
<b>Total Attachments: 2</b>	
source=Assignment_0332USU1#page1.tif	
source=Assignment_0332USU1#page2.tif	

RJ 9/15/17  
1/2

HSML - 20424.0332USU1

### ASSIGNMENT

WHEREAS, I, Robert J. Roth, having an address of 350 S. 20th St., La Crosse, WI 54601, made certain new and useful inventions and improvements for which I filed a US Non-provisional application, on , that has application no. and which is entitled COOLING CIRCUIT FOR A VARIABLE FREQUENCY DRIVE.

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 800-E Beaty Street, Davidson, North Carolina 28036 (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, I 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 I 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, I do hereby agree that I and my 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

RJR 9/15/17  
2/2

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 15 day of  
September, 2017.



Inventor: Robert J. Roth