# 506427594 12/30/2020

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6474360

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
MARK MITCHELL MACCRACKEN	12/30/2020
SUSANNA STAUBLY HANSON	12/29/2020

### **RECEIVING PARTY DATA**

Name:	TRANE INTERNATIONAL INC.	
Street Address:	800-E BEATY STREET	
City:	DAVIDSON	
State/Country:	ry: NORTH CAROLINA	
Postal Code: 28036		

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17138156

## **CORRESPONDENCE DATA**

**Fax Number:** (612)455-3801

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.

**Phone:** 612 455 3800

**Email:** jsilbaugh@hsml.com

Correspondent Name: TRANE - HAMRE, SCHUMANN, MUELLER & LARSO

Address Line 1: 45 SOUTH SEVENTH STREET

Address Line 2: SUITE 2700

Address Line 4: MINNEAPOLIS, MINNESOTA 55402-1683

ATTORNEY DOCKET NUMBER:	ER: 20424.0657US01	
NAME OF SUBMITTER:	BRYAN A. WONG	
SIGNATURE: /bryan a. wong/		
DATE SIGNED:	12/30/2020	

## **Total Attachments: 4**

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PATENT 506427594 REEL: 054778 FRAME: 0691

#### ASSIGNMENT

WHEREAS, we, Mark Mitchell MacCracken, having an address of 6365 Collins Ave., Apt 3103, Miami Beach, Florida 33141 (US) and Susanna Staubly Hanson, having an address of 2424 Sunrise Drive, La Crosse, Wisconsin 54601 (US), made certain new and useful inventions and improvements for which we filed an application US Non-provisional application, on , that has application no. and which is entitled STORAGE SOURCE AND CASCADE HEAT PUMP SYSTEMS.

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, 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, 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

PATENT REEL: 054778 FRAME: 0692 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 h	nave hereunto set my hand this 30th day of
December , 20 Zo.	
••• 	Mark M. MacCacker
Ti di	nventor: Mark Mitchell MacCracken
IN TESTIMONY WHEREOF, I I	nave hereunto set my hand this day of
· 	
I	nventor: Susanna Staubly Hanson

#### ASSIGNMENT

WHEREAS, we, Mark MacCracken, having an address of c/o Trane, 3600 Pammel Creek Road, La Crosse, WI 54601 (US) and Susanna Staubly Hanson, having an address of 2424 Sunrise Drive, La Crosse, Wisconsin 54601 (US), made certain new and useful inventions and improvements for which we filed an application US Non-provisional application, on , that has application no. and which is entitled STORAGE SOURCE AND CASCADE HEAT PUMP SYSTEMS.

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, 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

PATENT REEL: 054778 FRAME: 0694 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, 20	I have hereunto set my hand this day of
		Inventor: Mark MacCracken
December	IN TESTIMONY WHEREOF, 2020	I have hereunto set my hand this 29th day of
		/Susanna Staubly Hanson/ Inventor: Susanna Staubly Hanson

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**RECORDED: 12/30/2020**