

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
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EPAS ID: PAT5998758

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
YUNFEI QIN	12/13/2013
JIANMING ZHANG	12/23/2013
RECEIVING PARTY DATA	
Name:	TRANE INTERNATIONAL INC.
Street Address:	ONE CENTENNIAL AVENUE
City:	PISCATAWAY
State/Country:	NEW JERSEY
Postal Code:	08855
Name:	TRANE AIR CONDITIONING SYSTEMS (CHINA) CO., LTD.
Street Address:	SUZHOU DONGLU NO. 88
City:	TAICANG, JIANGSU PROVINCE
State/Country:	CHINA
Postal Code:	215400
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14902643
CORRESPONDENCE DATA	
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ATTORNEY DOCKET NUMBER:	20424.0182USWO
NAME OF SUBMITTER:	BRYAN A. WONG
SIGNATURE:	/bryan a. wong/
DATE SIGNED:	03/05/2020

Total Attachments: 2

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ASSIGNMENT

WHEREAS, we, Yunfei QIN, having an address at No. 100 Zun Yi Road, Shanghai 200051 China and Jianming ZHANG, having an address at No. 100 Zun Yi Road, Shanghai 200051 China, made certain new and useful inventions and improvements for which we filed a PCT international patent application in China on July 1, 2013, that has application no. PCT/CN2013/078584 and which is entitled METHOD OF CONTROLLING A FLUID CIRCULATION SYSTEM;

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 and TRANE AIR CONDITIONING SYSTEMS (CHINA) CO., LTD., a corporation organized and existing under and by virtue of the laws of China, and having an office and place of business at Suzhou Donglu No. 88, Taicang, Jiangsu Province 215400 China (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 13 day of
Dec., 2013.

Yunfei Qin
Inventor: Yunfei QIN

410523198308193019
National ID number

IN TESTIMONY WHEREOF, I have hereunto set my hand this 23 day of
Dec, 2013.

Jianming Zhang
Inventor: Jianming ZHANG

130223198009010346
National ID number