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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4849145

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHRISTOPHER BLAKE SMITH	03/02/2018
JAMES JOSEPH WILTZIUS	12/20/2017
MANAS RANJAN PANDA	12/20/2017
MAGESHKUMAR MUTHUSWAMY	12/20/2017

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15288054

CORRESPONDENCE DATA

Fax Number: (631)488-0842

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: 6314880840

Email: docketing@salernolaw.com THE SALERNO LAW FIRM, P.C. **Correspondent Name:** Address Line 1: 1955 DEER PARK AVENUE Address Line 4: DEER PARK, NEW YORK 11729

ATTORNEY DOCKET NUMBER:	32176US02(INGE-031)
NAME OF SUBMITTER:	RUSSELL S. SALERNO
SIGNATURE:	/Russell S. Salerno/
DATE SIGNED:	03/02/2018

Total Attachments: 5

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ASSIGNMENT

WHEREAS, we, Christopher Blake Smith of Whitehouse, TX; James Joseph Wiltzius of Forest Lake, MN; Manas Ranjan Panda of Chennai, India; and Mageshkumar Muthuswamy of Chennai, India, have made certain new and useful inventions and improvements for which we filed a U.S. Utility Application on October 7, 2016, having Application Serial No. 15/288,054 and entitled HVAC THERMOSTAT;

AND WHEREAS, Trane International Inc., a corporation having an office and place of business at 800-E Beaty Street, Davidson, North Carolina, United States of America (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;

Assignment to Trane International Inc. Attorney Docket: 32176US02 (INGE-031) Page 1 of 2

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		Inventor: Christopher Blake Smith	ssec.
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		Inventor: James Joseph Wiltzius	
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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

Assignment to Trane International Inc. Attorney Docket: 32176US02 (INGE-031) Page 2 of 2

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of Inventor: Christopher Blake Smith IN TESTIMONY WHEREOF, I have hereunto set my hand this day of Inventor: James Joseph Wiltzius IN TESTIMONY WHEREOF, I have hereunto set my hand this day of Inventor: Manas Ranjan Panda			es es es estados a caracteras a se estados es estados en estados en estados en estados en estados en estados e
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AND, furthermore we covenant and agree with said Assignee, its successors and assigns,

* * * * *

Inventor: Mageshkumar Muthuswamy

Assignment to Trane International Inc. Attorney Docket: 32176US02 (INGE-031) Page 2 of 2

ASSIGNMENT

WHEREAS, we, Christopher Blake Smith of Whitehouse, TX; James Joseph Wiltzius of Forest Lake, MN; Manas Ranjan Panda of Chennai, India; and Mageshkumar Muthuswamy of Chennai, India, have made certain new and useful inventions and improvements for which we filed a U.S. Utility Application on October 7, 2016, having Application Serial No. 15/288,054 and entitled HVAC THERMOSTAT;

AND WHEREAS, Trane International Inc., a corporation having an office and place of business at 800-E Beaty Street, Davidson, North Carolina, United States of America (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;

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Page 1 of 2

Homas Laya Sach

REEL: 045092 FRAME: 0865

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 each of us. IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of , 20____. Inventor: Christopher Blake Smith IN TESTIMONY WHEREOF, I have hereunto set my hand this day of Inventor: James Joseph Wiltzius IN TESTIMONY WHEREOF, I have hereunto set my hand this 20th, day of Homer Karpandand Inventor: Manas Ranjan Panda IN TESTIMONY WHEREOF, I have hereunto set my hand this 20th day of S. SELVAM, BA.BL. Inventor: Mageshkumar Muthuswamy ADVOCATE & NOTARY 26-J-BLOCK,

AND, furthermore we covenant and agree with said Assignee, its successors and assigns,



VENKATTAPURAM, SAIDAPET, CHENNA-600 015.

> Assignment to Trane International Inc. Attorney Docket: 32176US02 (INGE-031) Page 2 of 2

> > PATENT REEL: 045092 FRAME: 0866

RECORDED: 03/02/2018