

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3105564

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GREGORY S. BROWN	04/01/2014
BILLY W. NORRELL	11/04/2008
JOHN T. TAYLOR	12/02/2004

RECEIVING PARTY DATA

Name:	Trane International Inc.
Street Address:	One Centennial Avenue
City:	Piscataway
State/Country:	NEW JERSEY
Postal Code:	08855

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13630579

CORRESPONDENCE DATA

Fax Number: (972)731-2289
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: 972-731-2288
Email: brobertson@dfw.conleyrose.com
Correspondent Name: J. ROBERT BROWN, JR.
Address Line 1: 5601 GRANITE PARKWAY, SUITE 500
Address Line 4: PLANO, TEXAS 75024

ATTORNEY DOCKET NUMBER:	4236-10701
NAME OF SUBMITTER:	J. ROBERT BROWN, JR.
SIGNATURE:	/J. Robert Brown, Jr./
DATE SIGNED:	11/12/2014

Total Attachments: 9

source=TRANE_10701_Assignment_and_Employment_Agreements#page1.tif
 source=TRANE_10701_Assignment_and_Employment_Agreements#page2.tif
 source=TRANE_10701_Assignment_and_Employment_Agreements#page3.tif
 source=TRANE_10701_Assignment_and_Employment_Agreements#page4.tif
 source=TRANE_10701_Assignment_and_Employment_Agreements#page5.tif

PATENT

source=TRANE_10701_Assignment_and_Employment_Agreements#page6.tif

source=TRANE_10701_Assignment_and_Employment_Agreements#page7.tif

source=TRANE_10701_Assignment_and_Employment_Agreements#page8.tif

source=TRANE_10701_Assignment_and_Employment_Agreements#page9.tif

ASSIGNMENT OF APPLICATION FOR PATENT - PAGE ONE

WHEREAS, **Billy W. Norrell of Tyler**, in the County of **Smith** and the State of **Texas**; **Gregory S. Brown of Flint**, in the County of **Smith** and the State of **Texas**; and **John Tanner Taylor of Flint**, in the County of **Smith** and the State of **Texas** have invented certain new and useful improvements in **System and Method for Managing HVAC Excess Air Condition** for which they have made application for Letters Patent of the United States of America;

AND WHEREAS, **Trane International Inc.**, a corporation of Delaware having a principal place of business in the city of **New York**, County of **New York** and State of **New York**, desirous of acquiring an interest therein and in the Letters Patent to be obtained therefor from the United States;

NOW THEREFORE, be it known by all whom it may concern, that, for and in consideration of One Dollar (\$1.00) and other valuable consideration to us in hand paid, the receipt of which is hereby acknowledged, we have assigned, sold, and set over, and by these presents do assign, sell, and set over unto the said **Trane International Inc.** for the territory of the United States of America, and for all foreign countries, the full and exclusive right, title, and interest in and to the said invention, as fully set forth and described in the specification prepared and executed by us, preparatory to obtaining Letters Patent therefor; said invention, application and Letters Patent to be held and enjoyed by the said **Trane International Inc.** for their own use and behoof, and for its legal representatives to the full end of the term for which said Letters Patent are granted, as fully and entirely as the same would have been held by us had this assignment and sale not been made.

ASSIGNMENT OF APPLICATION FOR PATENT - PAGE THREE

IN TESTIMONY WHEREOF, I hereunto set my hand and affix my seal at (County) Smith, State of Texas, this 1st day of April A.D. 2014.

Signed, sealed and delivered in the presence of:

Witnesses

Inventor

Phillip E Beckman

Gregory S Brown

Gregory S. Brown

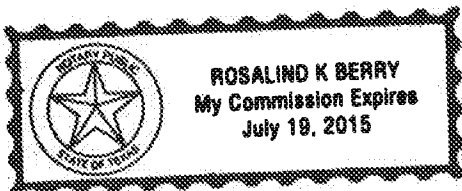
Greg Taylor

State of Texas)

County of Smith) ss.

Before me personally appeared said **Gregory S. Brown** and acknowledged the foregoing instrument to be his free act and deed this 31 day of MARCH, 2014.

[Seal]



Rosalind K Berry
Notary Public

Norrell, Billy

TRANE U.S., INC. AGREEMENT CONCERNING INVENTIONS
AND PROPRIETARY INFORMATION

This agreement is signed by me as a condition, and in consideration, of my employment by Trane U.S., Inc., Trane International Inc. and/or their subsidiary or affiliate companies, whether direct or indirect ("Trane" or the "Company").

1. With respect to information, inventions, all works of authorship, and discoveries developed, made, created, or conceived by me, either alone or with others, at any time during my employment by the Company and whether or not within normal working hours, arising out of such employment or pertinent to any field of business or research in which, during such employment, the Company therefor is engaged or (if such is known to or ascertainable by me) is considering engaging, I agree:
 - a) that all such information, inventions, all works of authorship, and discoveries, whether or not whether patentable, copyrightable, trademarkable, or not, shall be and remain the sole property of the Company;
 - b) that all works amounting to original works of authorship that are made by me (solely or jointly with others) within the scope of and during the period of my employment with the Company and that are protectible by copyright are "works made for hire," as that term is defined in the United States Copyright Act. The undersigned agrees, as noted in subparagraph (e), to assign to the Company, its successors and assigns, all right, title and interest to each and every Invention, whether or not such Invention is a "work for hire" as that term is defined in the United States Copyright Act;
 - c) to disclose promptly to an authorized representative of the Company all such information, inventions, all works of authorship, and discoveries, and all information in my possession as to possible applications and uses thereof;
 - d) not to file any patent, copyright or trademark application relating to any such information, invention, work of authorship, or discovery except with the prior written consent of an authorized representative of the Company;
 - e) at the request of the Company, and without expense to me, to execute such documents and perform such other acts as the Company deems necessary, to obtain patents, copyrights or trademarks on such information, invention, work of authorship, or discovery in a jurisdiction or jurisdictions designated by the Company, and to assign to the Company or its designee such inventions and all patent applications and patents relating thereto; and
 - f) that the decision whether or not to commercialize or market any information, invention, work of authorship, or discovery, developed by me solely or jointly with others is within the Company's sole discretion and for the Company's sole benefit and that no royalty will be due to me as a result of the Company's efforts to commercialize or market any such information, invention, work of authorship, or discovery.

2. With respect to the information, inventions, works of authorship and discoveries referred to in Paragraph 1, and also with respect to all other information, whatever its nature and form and whether obtained orally, by observation, from graphic materials

(as defined below in subparagraph (f)) or from or through substances, models, prototypes and the like containing or relating to any such information, works of authorship, invention, or discovery, or otherwise (except such as is generally available through publication) obtained by me during or as a result of my employment by the Company and relating to any product, process, or apparatus or to any use of any of them, or to materials, tolerances, specifications, costs (including manufacturing costs), prices, or to any plans of the Company (all collectively referred to as "Confidential Information"), I agree:

- a) to hold all Confidential Information in strict confidence, and not to publish or otherwise disclose any thereof except, with the prior consent of an authorized representative of the Company;
 - b) to take all reasonable precautions to assure that all Confidential Information are properly protected from access by unauthorized persons;
 - c) to make no use of any Confidential Information at any time except as required in the performance of my duties for the Company;
 - d) upon termination of my employment by the Company, or upon request of the Company, to deliver to it all copies of all graphic materials (as defined below in subparagraph (f)) containing or referring to Confidential Information and all of which graphic materials and other things shall be and remain the sole property of the Company. Notwithstanding the foregoing, Confidential Information shall not include information that (i) is or becomes generally known to the public not as a result of a disclosure by the receiving party of such Confidential Information, except as provided for in this Agreement; (ii) is rightfully in the possession of the receiving party prior to acquisition under this Agreement without restriction or obligation of confidentiality, or (iii) is received by the receiving party in good faith and without restriction from a third party, not under a confidentiality obligation to the disclosing party and having the right to make such disclosure;
 - e) If disclosure of Confidential Information is required by law at any time, I shall promptly notify the Company in writing sufficiently in advance of such disclosure, and provide the Company with copies of any related information so that the Company may take appropriate action to protect the Confidential Information. Any such disclosure shall be limited to the greatest extent possible; and
 - f) The term "graphic materials" includes letters, memoranda, reports, notes, notebooks, books, of account, drawings, prints, specifications, formulas, data printouts, microfilms, magnetic tapes, and other documents and recordings, together with all copies thereof.
3. My obligations under Paragraphs 1 and 2 hereof shall remain in effect throughout my employment by the Company, and ever thereafter, unaffected by any transfer between Trane and a affiliated company or between subsidiaries, and without regard to the reason for termination of my employment. I recognize and agree that the Company may not have an adequate remedy at law in the event that I breach the provisions of this Agreement or accept other employment that will likely call upon me to use Confidential Information other than for the benefit of the Company and that the

Company may suffer irreparable damages and injury in such event. Therefore, I agree that the Company shall be entitled to temporary and permanent injunctive relief against me in the event of a breach or threatened breach of this Agreement. Such permanent or injunctive relief shall in no way limit other remedies that the Company may have against me for any breach of the terms of these provisions.

4. All inventions and discoveries made or conceived by me prior to the date of my employment by the Company are listed on the back of this Agreement or on a sheet attached hereto. (Please give patent numbers, serial numbers of patent applications, and specific information as to subject matter and dates of conception and patent protection.) Any invention or discovery made by me and not included in the aforementioned list shall be deemed to have been made or conceived during my employment by the Company.
5. I agree to respect any and all valid obligations which I may now have to prior employers or to others relating to confidential information, inventions, or discoveries which are the property of those prior employers or others as the case may be. I have supplied or shall promptly supply to the Company a copy of each written agreement setting forth any such obligation.
6. This Agreement shall bind my heirs, executors, administrators, legal representatives, and assignees. This Agreement supersedes, as of the date hereof, any prior agreement which I may have executed in favor of the Company concerning inventions or proprietary information. No waiver or amendment of this Agreement shall be valid unless in writing and signed by a representative of the Company having actual authority to grant such waiver or make such amendment.
7. Nothing in this Agreement alters my status as an at-will employee of the Company.

IN WITNESS WHEREOF, I BILLY W. NORRELL have signed this
(Please print name)
Agreement, retaining one signed and dated copy thereof, this 9th day of NOV.,
208 at _____

Signature Billy W. Norrell L.S.

Witness: Amy Clem

9-80

AMERICAN STANDARD INC., AMERICAN STANDARD INTERNATIONAL INC.
AND SUBSIDIARIES
AGREEMENT CONCERNING INVENTIONS AND PROPRIETARY INFORMATION

This Agreement is signed by me as a condition and in consideration of my employment by one or more of AMERICAN STANDARD INC., AMERICAN STANDARD INTERNATIONAL INC. and/or their subsidiary companies, whether direct or indirect (hereinafter collectively referred to as the "Company").

1. With respect to information, copyrights, inventions, and discoveries developed, made, or conceived by me, either alone or with others, at any time during my employment by the Company and whether or not within normal working hours, arising out of such employment or pertinent to any field of business or research in which, during such employment, Company is engaged or (if such is known to or ascertainable by me) is considering engaging, I agree:

- a. that all such information, copyrights, inventions, and discoveries, whether or not patented or patentable, shall be and remain the sole property of the Company;
- b. to disclose promptly to an authorized representative of the Company all such information, copyrights, inventions, and discoveries, and all information in my possession as to possible applications and uses thereof;
- c. not to file any patent application relating to any such invention or discovery except with the prior consent of an authorized representative of the Company; and
- d. at the request of the Company, and without expense to me, to execute such documents and perform such other acts as the Company deems necessary, to obtain patents on such inventions in a jurisdiction or jurisdictions designated by the Company, and to assign to the Company or its designee such copyrights, inventions and all patent applications and patents relating thereto.

2. With respect to the information, copyrights, inventions and discoveries referred to in Paragraph 1, and also with respect to all other information, whatever its nature and form and whether obtained orally, by observation, from graphic materials, or otherwise (except such as is generally available through publication) obtained by me during or as a result of my employment by the Company and relating to any product, process, or apparatus or to any use of any of them, or to materials, tolerances, specifications, costs (including manufacturing costs), prices, or to any plans of Company, I agree:

- a. to hold such information, copyrights, inventions, and discoveries in strict confidence and not to publish or otherwise disclose any thereof except with the prior consent of an authorized representative of the Company;
- b. to take all reasonable precautions to assure that all such information, copyrights, inventions, and discoveries are properly protected from access by unauthorized persons;
- c. to makes no use of any such information, copyrights, invention, or discovery except as required in the performance of my duties for the Company; and
- d. upon termination of my employment by the Company, or upon request of the Company, to deliver to it all graphic materials and all substances, models, prototypes and the like containing or relating to any such information, invention or discovery, all of which graphic materials and other things shall be and remain the sole property of the Company. The term "graphic materials" includes letters, memoranda, reports, notes, notebooks, books of account, drawings, prints, specifications, formulas, data printouts, microfilms, magnetic tapes, and other documents and recordings, together with all copies thereof.

JTT

3. My obligations under Paragraph 1 and 2 hereof shall remain in effect throughout my employment by the Company, and ever thereafter, unaffected by any transfer within the Company, and without regard to the reason for termination of my employment.

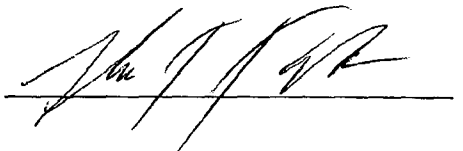
4. All copyrights, inventions and discoveries made or conceived by me prior to the date of my employment by the Company are listed on the back of this Agreement or on a sheet attached hereto. (Please give patent numbers, serial numbers of patent applications, and specific information as to subject matter and dates of conception and patent protection.) Any copyright, invention or discovery made by me and not included in the aforementioned list shall be deemed to have been made or conceived during my employment by the Company.


5. I agree to respect any and all valid obligations which I may now have to prior employers or to others relating to confidential information, copyrights, inventions, or discoveries which are the property of those prior employers or others as the case may be. I have supplied or shall promptly supply to the Company a copy of each written agreement setting forth any such obligation.

6. This Agreement shall bind my heirs, executors, administrators, legal representatives, and assignees. This Agreement supersedes, as of the date hereof, any prior agreement which I may have executed in favor of Company concerning inventions or proprietary information. No waiver or amendment of this Agreement shall be valid unless in writing and signed by a representative of the Company having actual authority to grant such waiver or make such amendment.

IN WITNESS WHEREOF, I, John T Taylor, have signed this Agreement,
(Please print name.)

retaining one signed and dated copy thereof, this 2 day of December,
2004 at 7:30 am.

Employee Signature: 

Witness: 

There is a two page attachment as per paragraph 4.
JTT

Attachment for Paragraph 4 to the Agreement Concerning Inventions and Propriety Information

Previous Projects:

LodeSource – A source code dependency management solution.

LodeSource facilitates the software development process by empowering users with the ability to capture and track the context of dependencies of individual components. Equipped with the context information, integrating changes in multi-developer environments becomes effortless. LodeSource handles all of the complex issues of identifying modules and insuring inter-module compatibility, allowing developers to spend more time writing code. LodeSource is the first product developed solely to manage dependencies and compatibilities of components from the individual file level to the complex application level. LodeSource maintains a descriptive catalog of your entire code base. The catalog is fully cross referenced for fast searching. Users can research what code modules are available, how to use the modules, and what (if any) support modules are required. LodeSource will

- Provide access to all of the dependency relationships incurred by each context. Metrics are also kept that track the stability and quality of each context.
- Facilitate the software development integration process.
- Keep a history of dependency relationships that parallels the different versions of the software as it is developed.
- Allow inter project sharing of code at any level.
- Make reuse of code not only possible but manageable.
- Be available with both a command line tool and a GUI for ease of use.
- Work with most programming environments including but not limited to C, C++, and Java.

Existing and on going projects:

eXtreme Minimal Kernel (XMK) is Real Time Operating System for Microcontrollers

XMK's primary design goal is to be small, extremely small, without sacrificing performance or functionality. The was originally targeted for 8bit microcontrollers but has since been scaled up to 16bit and 32bit platforms The XMK operating system is divided into two packages. The first package, XMK Scheduler includes only the core scheduler and kernel interfaces. This package provides the preemptive scheduler, threads, and thread synchronization primitives. The second package, the Application Programming Layer (APL), is a kernel and platform independent middleware/framework library that provides interfaces such as inter-thread communications, heaps, memory pools, lists and containers, string handling, parsing tools, logging facilities, file descriptors and abstract IO, file systems, graphical user interface, database and persistence storage management, command shells, debug facilities, networking, hardware drivers, etc.

 12-2-2004

Attachment for Paragraph 4 to the Agreement Concerning Inventions and Propriety Information

Technical book: *A Guide to the XMK Real Time Operating System for Microcontrollers*

Abstract

The use of a Real Time Operating System (RTOS) on microcontrollers range from a necessity, to an unaffordable luxury, to not required. The determining factors for using an RTOS are: application fit, sufficient hardware resources, and the dollar cost. This book explores when it is appropriate to use an RTOS, the resource constraints for an RTOS, and presents a *low budget* RTOS solution, the eXtreme Minimal Kernel. XMK is an open source Real Time Operating System that runs on low end 8bit microcontrollers with only onboard ROM and RAM as well as high end 32bit platforms.

Jcl C++ Class Library.

The goal of the Jcl C++ library is to provide a C/C++ based platform independent middleware, tools, and framework with a focus on embedded development environments. The Jcl C++ library contains a large range of functions and interfaces such as: threading, streamio, fileio, socketio, parsing, string handling, logging, command line parsing, command languages, memory management, timers, Finite State Machine infrastructure, database support, command shells, debug facilities, etc.

BENV - a multi-host, cross target build environment.

BENV is a command line based build environment that allows developers to use make files without writing makefiles. BENV is wrapper on top of GNU's make tool that reduces a project's makefile to a list of source code directories to compile and link, and a list of compile and link options/switches. BENV is built around two major concepts: toolsets and projects. A toolset is a pre-determined configuration that details a specific host environment, target platform, compiler, target OS parameters, and essential compile and link options. A project defines an *artifact*. An artifact is the final derived object from a set of source files. The artifact can be anything, an executable, hex file, ROM image, shared or static library, jar file, etc.

 12-2-2004
808