

# PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
Name	Execution Date
Joseph A. Boswell	06/16/2010
Peng Cheng	06/16/2010
<b>RECEIVING PARTY DATA</b>	
Name:	THERMAVANT TECHNOLOGIES LLC
Street Address:	1103 E Broadway
City:	Columbia
State/Country:	MISSOURI
Postal Code:	65201
<b>PROPERTY NUMBERS Total: 1</b>	
Property Type	Number
Application Number:	12745168
<b>CORRESPONDENCE DATA</b>	
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ATTORNEY DOCKET NUMBER:	UMO 1565.2 (KFJ/DSS)
NAME OF SUBMITTER:	Debra S. Staas
<p>Total Attachments: 4</p> <p>source=01247859#page1.tif</p> <p>source=01247859#page2.tif</p> <p>source=01247859#page3.tif</p>	

OP \$40.00 12745168

**501265502**

**PATENT**  
**REEL: 024853 FRAME: 0855**



ASSIGNMENT

**WHEREAS, We,** Joseph A. Boswell of San Francisco, California, and Peng Cheng of Columbia, Missouri, have co-invented with Hongbin Ma of Columbia, Missouri an improvement in THERMALLY DRIVEN HEAT PUMP FOR HEATING AND COOLING (08UMC016; UMC 1565.2) described in a PCT application assigned Serial No. PCT/US2008/084968, filed November 26, 2008, nationalized in the United States as U.S. patent application assigned Serial No. 12/745,168, filed May 27, 2010;

**AND, WHEREAS,** THERMAVANT TECHNOLOGIES LLC of Columbia, MO, a corporation of the State of Delaware (hereinafter referred to as "ASSIGNEE") is desirous of acquiring certain rights thereunder;

**NOW, THEREFORE,** for one dollar and other good and valuable consideration, receipt of all of which is hereby acknowledged, we have agreed to and do hereby sell, assign and transfer unto said ASSIGNEE our entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said invention, said PCT application, said United States application, any other United States applications (including provisional, non-provisional, divisional, continuing, or reissue applications) based in whole or in part on said PCT application or in whole or in part on said invention, any foreign applications based in whole or in part on any of the aforesaid PCT application or United States applications or in whole or in part on said invention, and any and all patents (including extensions thereof) of any country which have been or

may be granted on any of the aforesaid applications or on said invention or any part thereof;

**TO BE HELD AND ENJOYED** by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us had no sale and assignment of said interest been made;

**AND We** hereby authorize and request the Director of the United States Patent and Trademark Office of the United States of America to issue any and all United States patents which may be granted upon said United States applications or any of them, or upon said invention or any part thereof, to said ASSIGNEE either solely or jointly with another assignee or assignees;

**AND We** hereby jointly and severally agree for ourselves and for our respective heirs, executors and administrators, to execute without further consideration any further lawful documents and any further assurances, and any provisional, non-provisional, divisional, continuing, reissue, or other applications for patents of any country, that may be deemed necessary by said ASSIGNEE fully to secure to said ASSIGNEE its interest as aforesaid in and to said invention or any part thereof, and in and to said several patents or any of them;

**AND We** hereby jointly and severally covenant for ourselves and our respective legal representatives that we have granted no right or license to make, use or sell said invention, to anyone except said ASSIGNEE, that prior to the execution of this deed our right, title and interest in said invention had not been otherwise encumbered, and that we have not executed and will not execute any instrument in conflict herewith.

June 16, 2010

Date

JOSEPH A. BOSWELL

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of April, 2010, before me, a Notary Public, personally appeared Joseph A. Boswell to me known to be the person described, in and who executed, the foregoing assignment and acknowledged that he executed same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal and the date and year last above written.

SEE BELOW

Notary Public

My Commission Expires:

ACKNOWLEDGMENT

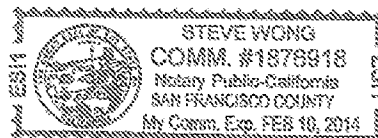
State of California, County of SAN FRANCISCO  
On JUNE 16, 2010 before me, STEVE WONG (notary public),  
personally appeared JOSEPH A. BOSWELL

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Steve Wong (Seal)



IN WITNESS WHEREOF, we have hereunto set our hands.

6/16/2010  
Date

Peng Cheng  
PENG CHENG

STATE OF Missouri )  
COUNTY OF USA )

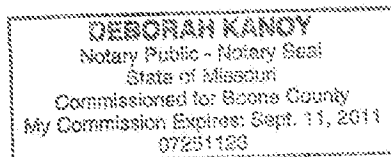
On this 16<sup>th</sup> day of June, 2010, before me, a Notary Public, personally appeared Peng Cheng to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

[Signature]  
Notary Public

My Commission Expires:

Sept 11, 2011



KEJ/dss