504511506 08/21/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT4558211 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TIM BRIZENDINE	06/22/2017
JEFF MANGUM	06/22/2017
BRUCE PERKINS	06/22/2017

RECEIVING PARTY DATA

Name:	LENNOX INDUSTRIES INC.
Street Address:	2100 LAKE PARK BLVD.
City:	RICHARDSON
State/Country:	TEXAS
Postal Code:	75080

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15632035

CORRESPONDENCE DATA

Fax Number: (214)545-3473

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: (214) 545-3472 Email: mkraut@fbtlaw.com **Correspondent Name:** CRAIG J. COX

100 CRESCENT COURT, SUITE 350 Address Line 1:

Address Line 4: DALLAS, TEXAS 75201

ATTORNEY DOCKET NUMBER: P150112 0648273/21304 NAME OF SUBMITTER: CRAIG J. COX SIGNATURE: /Craig J. Cox/ **DATE SIGNED:** 08/21/2017

Total Attachments: 4

source=1718-258#page1.tif source=1718-258#page2.tif source=1718-258#page3.tif source=1718-258#page4.tif

> **PATENT** REEL: 043342 FRAME: 0228 504511506

RECORDATION FORM COVER SHEET			
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.			
Name of conveying party(ies)	2. Name and address of receiving party(ies)		
	Name: Lennox Industries Inc.		
Tim Brizendine; Jeff Mangum; Bruce Perkins	Internal Address:		
Additional name(s) of conveying party(ies) attached? Yes No. 3. Nature of conveyance/Execution Date(s): Execution Date(s) 06/22/2017	Street Address: 2100 Lake Park Blvd.		
Assignment Merger Security Agreement Change of Name Joint Research Agreement	City: Richardson State: TX		
Government Interest Assignment Executive Order 9424, Confirmatory License	Country: US Zip: 75080		
Other	Additional name(s) & address(es) attached? Yes No		
A. Patent Application No.(s) 15/632,035	document serves as an Oath/Declaration (37 CFR 1.63). B. Patent No.(s)		
Additional numbers at			
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1		
Name: Craig J. Cox	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0		
Internal Address: Frost Brown Todd LLC	7. Total ree (37 CFR 1.21(fl) & 3.41) \$		
Street Address: 100 Crescent Court, Suite 350	Authorized to be charged to deposit account Enclosed		
offeet Address.	None required (government interest not affecting title)		
City: Dallas	8. Payment Information		
State: TX Zip: 75201			
Phone Number: (214) 580-5855	Deposit Account Number 062226		
Docket Number:			
Email Address: Ccox@fbtlaw.com	Authorized User Name Craig J. Cox		
9. Signature: Signature	august 21, 2017		
- · Signature	Date		
Craig J. Cox	Total number of pages including cover		
Craig J. Cox Name of Person Signing			

PATENT REEL: 043342 FRAME: 0229

ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT, made by Tim Brizendine, residing at 301 Deaton Dr., Rockwall, Texas 75087; Jeff Mangum, residing at P.O. Box 24, Argyle, Texas 76226; and Bruce Perkins, residing at 1321 Silver Maple Dr., Carrollton, Texas 75007; (hereinafter referred to as Assignors);

WHEREAS, Assignors have invented certain new and useful improvements in "Method for Solving Charge Imbalance in Existing Split Heat Pump," set forth in a Patent application for Letters Patent of the United States, filed June 23, 2017, U.S. Patent Application No. 15/632,035; and

WHEREAS, Lennox Industries Inc., a Corporation organized under and pursuant to the laws of Delaware having its principal place of business at 2100 Lake Park Blvd., Richardson, Texas 75080 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the joint and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent abovementioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but

1

not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

Frost Brown Todd LLC

All practitioners at Customer Number 134338

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Date: Ce/22/17 Signature:	In Fregerdine
	Tim Brizendine
United States of America State of Indian ss.: County of Indian	
On this 22 day of Jury Brizendine, to me known to be the individual descrinstrument, and acknowledged execution of the sar	
CINDY F HARMON My Commission Expires June 17, 2019	Notary Public My Commission Expires: June 17, 2019

Date: June 23, 2017 Signature:	Jeff Mangum
United States of America State of	
On this day of day of Mangum, to me known to be the individual describinstrument, and acknowledged execution of the same	
CINDY F HARMON My Commission Expires June 17, 2019	Notary Public My Commission Expires: June 17, 3019
T 40 11 2	D 2/-
Date: JUNE 42, 2017 Signature:	Bruce Perkins
United States of America State of	
On this 200 day of Jutu Perkins, to me known to be the individual described instrument, and acknowledged execution of the same	4 5
CINDY F HARMON My Commission Expires June 17, 2019	Notary Public My Commission Expires: June 17, 2019

3

RECORDED: 08/21/2017