

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4548000

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JOSEPH TAPLEY	07/21/2017
JAY S. KORTH	07/21/2017
RORY MAHLON ROMERO	07/21/2017
JAKE PLEWA	07/21/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION
<b>Street Address:</b>	1001 AIR BRAKE AVENUE
<b>City:</b>	WILMERDING
<b>State/Country:</b>	PENNSYLVANIA
<b>Postal Code:</b>	15148
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15653836
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(412)471-4094
<i>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.</i>	
<b>Phone:</b>	412-471-8815
<b>Email:</b>	assignments@webblaw.com
<b>Correspondent Name:</b>	THE WEBB LAW FIRM
<b>Address Line 1:</b>	420 FT. DUQUESNE BLVD., SUITE 1200
<b>Address Line 2:</b>	ONE GATEWAY CENTER
<b>Address Line 4:</b>	PITTSBURGH, PENNSYLVANIA 15222
<b>ATTORNEY DOCKET NUMBER:</b>	4493-1704127
<b>NAME OF SUBMITTER:</b>	RICHARD L. BYRNE, REG. NO. 28,498
<b>SIGNATURE:</b>	/richard l. byrne/
<b>DATE SIGNED:</b>	08/14/2017
<b>Total Attachments: 7</b>	
source=1704127recordation#page1.tif	
source=1704127assign#page1.tif	

source=1704127assign#page2.tif

source=1704127assign#page3.tif

source=1704127assign#page4.tif

source=1704127assign#page5.tif

source=1704127assign#page6.tif

RECORDATION FORM COVER SHEET  
**PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)**

Joseph Tapley  
Jay S. Korth  
Rory Mahlon Romero  
Jake Plewa

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) 7/21/2017

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other \_\_\_\_\_

**2. Name and address of receiving party(ies)**

Name: Westinghouse Air Brake Technologies Corporation

Internal Address: \_\_\_\_\_

Street Address: 1001 Air Brake Avenue

City: Wilmerding

State: PA

Country: \_\_\_\_\_ Zip: 15148

Additional name(s) & address(es) attached? ☐ Yes ☒ No

**4. Application or patent number(s):**

☐ This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)

15/653,836

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

**5. Name and address to whom correspondence concerning document should be mailed:**

Name: Richard L. Byrne

Internal Address: The Webb Law Firm

Street Address: One Gateway Center  
420 Ft. Duquesne Blvd., Ste 1200

City: Pittsburgh

State: PA Zip: 15222

Phone Number: 412-471-8815

Docket Number: 4493 - 1704127

Email Address: assignments@webblaw.com

**6. Total number of applications and patents involved: 1**

**7. Total fee (37 CFR 1.21(h) & 3.41) \$ \_\_\_\_\_**

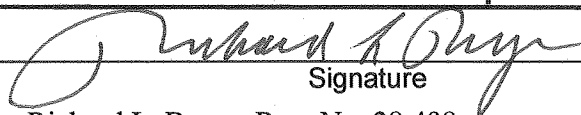
- ☐ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

**8. Payment Information**

Deposit Account Number \_\_\_\_\_

Authorized User Name \_\_\_\_\_

**9. Signature:**

  
Signature

August 14, 2017

Date

Richard L. Byrne, Reg. No. 28,498

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

7

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Application No. 15/653,836

Attorney Docket No. 4493-1704127

**ASSIGNMENT**

WHEREAS, as a below named inventor, I have invented certain new and useful improvements in

COOLING MODULE

(Invention Title)

☐ for which a United States Provisional Patent application was filed on \_\_\_\_\_ (mm/dd/yyyy) and bears Application Number \_\_\_\_\_ (hereinafter "said application").

AND/OR

☐ for which I have this day executed an application for a United States Patent (hereinafter "said application").

AND/OR

☒ for which an application for a United States Patent was filed on 07/19/2017 (mm/dd/yyyy) and bears Application Number 15/653,836 (hereinafter "said application").

AND/OR

☐ for which an international patent application was filed under the Patent Cooperation Treaty on \_\_\_\_\_ (mm/dd/yyyy), bearing Application No. \_\_\_\_\_ (hereinafter "said application").

AND, WHEREAS, WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION, a corporation of Delaware, having a place of business at 1001 Air Brake Avenue, Wilmerding, PA 15148, hereinafter called the "assignee", is desirous of acquiring the entire right, title, and interest in and to said application and the inventions and improvements therein disclosed.

NOW, THEREFORE, for good and valuable consideration paid to me by said assignee, the receipt of which is hereby acknowledged, I as the inventor or as one of the inventors, hereinafter the assignor(s), do hereby assign, sell and transfer unto said assignee the full and exclusive right, title and interest in and to said application and the inventions and improvements therein disclosed for the United States and all foreign countries, including rights of priority under the International Convention of Paris (1883) as amended, and any Letters Patent which may issue therefor in the United States and all foreign countries and all divisionals, non-provisionals, reissues, continuations, continuations-in-part, renewals and/or extensions thereof. Such assignment extends to the full ends of the terms of these applications and patents as fully and entirely as the same would have been held and enjoyed by me had this Assignment not been made.

I hereby authorize and request any attorney associated with The Webb Law Firm, Customer No. 28289, to insert here in parentheses (Application No. \_\_\_\_\_, filed \_\_\_\_\_) the filing date and application number of said application when known.

I covenant that I am the lawful owner(s) of said application, inventions and improvements, that the same are unencumbered, that no license has been granted to make, use or vend the said inventions or improvements or any of them, and that I have the full right to make this Assignment.

Application No. 15/653.836

Attorney Docket No. 4493-1704127

And for the consideration aforesaid, I agree individually and, if applicable, jointly that I will communicate to said assignee or the representatives thereof any facts known to me respecting said inventions and improvements, and will, upon request but without expense to me, testify in any legal proceedings, sign all lawful papers, execute all divisional, non-provisional reissue, continuation, continuation-in-part, renewal and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts deemed necessary or expedient by said assignee or by counsel for said assignee to assist or enable said assignee to obtain and enforce full benefits from the rights and interests herein assigned. This Assignment shall be binding upon my heirs, executors, administrators and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors and/or assigns, as the case may be, of said assignee.

1. FULL NAME OF ASSIGNOR:

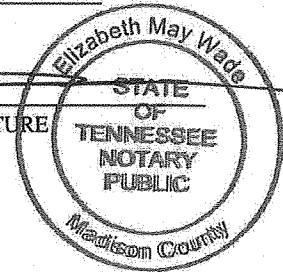
Joseph Tapley

RESIDENCE:

Medon, TN

EXECUTED this 21 day of July, 2017

SIGNATURE



WITNESS:

Elizabeth May Wade

Name:

My Commission Expires  
March 21, 2018

☒ Checked Box indicates \_\_\_ additional page(s).

Application No. 15/653,836

Attorney Docket No. 4493-1704127

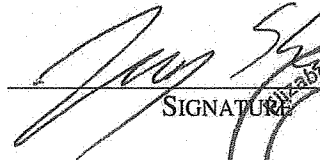
2. FULL NAME OF ASSIGNOR:

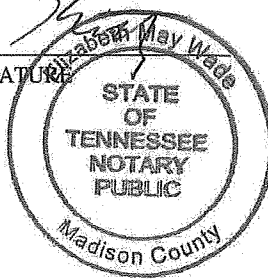
Jay S. Korth

RESIDENCE:

Jackson, TN

EXECUTED this 21 day of July, 2017

  
SIGNATURE



WITNESS:

Elizabeth May Wade

Name:

My Commission Expires  
March 21, 2018

Application No. 15/653,836

Attorney Docket No. 4493-1704127

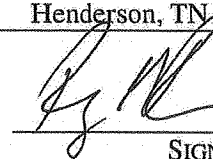
3. FULL NAME OF ASSIGNOR:

Rory Mahlon Romero

RESIDENCE:

Henderson, TN

EXECUTED this 21 day of July, 2017



SIGNATURE



WITNESS:

Elizabeth May Wade  
Name:

My Commission Expires  
March 21, 2018

Application No. 15/653,836

Attorney Docket No. 4493-1704127

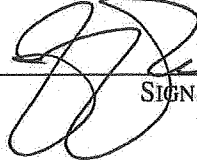
4. FULL NAME OF ASSIGNOR:

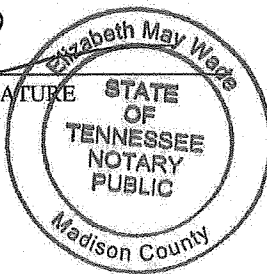
Jake Plewa

RESIDENCE:

Dyersburg, TN

EXECUTED this 21 day of July, 2017

  
SIGNATURE

  
STATE  
OF  
TENNESSEE  
NOTARY  
PUBLIC  
Madison County

WITNESS:

Elizabeth May Wade

Name:

My Commission Expires  
March 21, 2018



Application No. 15/653,836

Attorney Docket No. 4493-1704127

Acknowledgement of this Assignment is made by/on behalf of the Assignee:

NAME OF ASSIGNEE:

WESTINGHOUSE AIR BRAKE  
TECHNOLOGIES CORPORATION

PLACE OF BUSINESS:

Wilmerding, PA

EXECUTED this 8th day of August, 2017

  
SIGNATURE

Name: David M. Seitz

Title: Vice President

WITNESS:

\_\_\_\_\_  
Name: