506687167 05/27/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6733985

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ANDREW RYAN STAATS	05/13/2021
STUART JOHN BARR	05/13/2021

RECEIVING PARTY DATA

Name:	WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION
Street Address:	30 ISABELLA ST.
City:	PITTSBURGH
State/Country:	PENNSYLVANIA
Postal Code:	15212

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17318764

CORRESPONDENCE DATA

Fax Number: (314)584-4062

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: 314-584-4080

Email: Docket@splglaw.com

Correspondent Name: THE SMALL PATENT LAW GROUP, LLC

Address Line 1: 225 S. MERAMEC, SUITE 725 Address Line 4: ST. LOUIS, MISSOURI 63105

ATTORNEY DOCKET NUMBER:	WABP12826USCIP3 (0715US2)
NAME OF SUBMITTER:	CHRISTOPHER R. CARROLL
SIGNATURE:	/Christopher R. Carroll/
DATE SIGNED:	05/27/2021

Total Attachments: 5

source=WABP12826USCIP3_DeclarationandAssignment_27MAY2021#page1.tif source=WABP12826USCIP3_DeclarationandAssignment_27MAY2021#page2.tif source=WABP12826USCIP3_DeclarationandAssignment_27MAY2021#page3.tif source=WABP12826USCIP3_DeclarationandAssignment_27MAY2021#page4.tif source=WABP12826USCIP3_DeclarationandAssignment_27MAY2021#page5.tif

PATENT 506687167 REEL: 056376 FRAME: 0570

COMBINED DECLARATION AND GLOBAL ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

As the below named inventor(s), I/we hereby declare that this declaration and assignment are directed to:

SYSTEM AND METHOD FOR DETERMINING VEHICLE POSITION BY TRIANGULATION

	the specification of which is attached hereto OR
\boxtimes	United States application or PCT international application number
	17/318,764 filed on 12-May-2021, as amended on [date] (if applicable). (I hereby
	authorize and request the Company or its delegated attorneys or agents to inser
	above the application number and filing date of the application when known.)

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable by fine or imprisonment, or both. If in the United States, the relevant statute is 18 USC § 1001 and imprisonment is for not more than five (5) years.

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application including, for continuation-in-part applications, material information which became available between the filing date of the prior application and the filing date of the continuation-in-part application. If in the United States such information is as defined in 37 CFR § 1.56.

In accordance with my obligation(s) under an Employee Innovation and Proprietary Information Agreement or (as applicable) arising out of other agreements (such as, but not limited to, a Services Agreement between Wabtec Corporation or one of its subsidiaries such as Westinghouse Air Brake Technologies Corporation (collectively "Wabtec") and your employer), and/or for other good and valuable consideration of which I acknowledge receipt, I/we,

Inventor First Name	Inventor Middle Name	Inventor Last Name		Residence Town	Residence State	Residence Country
Andrew	Ryan	Staats	of	Cedar Rapids	IA	US
Stuart	John	Bar	of	Cedar Rapids	IA	US

hereby sell and assign to:

PATENT REEL: 056376 FRAME: 0571

	Name of Company:	Westinghouse Air Brake Technologies Corporation
	Entity Type (optional):	Delaware Limited Liability Company
***************************************	Address:	30 Isabella St., Pittsburgh, Pennsylvania, 15212 USA

herein referred to as "Company," its successors and assigns my entire respective rights, titles and interests in and to the invention and improvements made or conceived by me described in the application(s) listed above and in the following table (collectively the "Invention"):

Country of Filing	Type of Filing	Application Number	Filing Date	Title
US	Utility	16/193,036	16-Nov-2018	Method Of Determining Vehicle
				Position By Triangulation

(I hereby authorize and request the Company or its delegated attorneys or agents to insert above the application number and filing date of the application(s) when known.)

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, continuations-in-part, reexaminations, renewals, and reissues thereof, and all rights of priority resulting from the filing of the application(s), and authorize and request any official whose duty it is to issue patents, to issue any patent on the inventions and improvements resulting therefrom to the Company, or its successors or assigns, and agree that on request and without further consideration, I will communicate to the Company or its representatives or nominees any facts known to us respecting the inventions and improvements and testify in any legal proceeding, make all rightful oaths, sign all lawful papers and execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights in all countries including. but not limited to, any provisional, non-provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, for any derivation proceedings relating thereto, and, as to any patents that issue from such applications, for any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, and generally do everything possible to aid the Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for the invention and its improvements in all countries.

Remuneration claims of the inventor(s)/assignor(s) potentially arising from any country's law on employee Invention or service Invention, or any other respective country law are addressed as follows:

- I acknowledge and understand that the rights to the Invention belong to Wabtec Corporation, or its subsidiary/designee.
- I acknowledge and agree that the Invention(s) were created in the normal course of my duties (sometimes referred to as *Inventions de mission attribuables*).
- I acknowledge and agree that my accepting the remuneration award associated with this declaration and assignment document is a full, fair and sufficient accounting of the

PATENT REEL: 056376 FRAME: 0572

- currently known value, and this value is paid prior to the commercial exploitation of the Invention.
- To the extent allowed, I waive any right to future compensation in exchange for the present value of the remuneration award.
- I acknowledge and agree that I am unaware of any exceptional circumstances regarding the Invention.
- I acknowledge and agree that Wabtec's resources, support and knowledge were used in the creation of the Invention at the direction of Wabtec.
- I acknowledge and understand that Wabtec timely claims rights to the Invention.
- I acknowledge that collective labor agreements and/or local regulations may affect the validity and implementation of aspects of this declaration and assignment document. In such circumstances, I agree that the terms set forth herein control and are applied to the extent allowable.

[Signature Blocks follow]

Signature: _/Andrew Ryan Staats/	Date: 5/13/2021
Andrew Ryan Staats	
Witnessed by:	Date:
Signature	
Printed Name of Witness	
Witnessed by:Signature	Date:
Signature	
Printed Name of Witness	
Andrew Ryan Staats	Date:
Thirty on the serious	
CTATE OF	
STATE OF ss.	
This day of, assignor to me personally known as the in	before me personally came the above-named dividual who executed the foregoing assignment, who same of his own free will for the purposes therein set
This day of, assignor to me personally known as the in acknowledged to me that he executed the	dividual who executed the foregoing assignment, who

INVENTOR 1

Signature: /Stuart John Barr/ Date: 5/13/2021 Stuart John Barr Witnessed by: ______Signature Date: _____ Printed Name of Witness Witnessed by: ______Signature Date: _____ Printed Name of Witness SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY Stuart John Barr STATE OF SS. **COUNTY OF** This _____ day of _____, ____ before me personally came the above-named assignor to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he executed the same of his own free will for the purposes therein set forth. Seal

5

INVENTOR 2

PATENT REEL: 056376 FRAME: 0575

(Notary Public)

RECORDED: 05/27/2021