

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7059974

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CESAR DOMINGOS	10/21/2021
SHAWN GALLAGHER	09/29/2021
RAGHAV SHRIKANT KULKARNI	10/13/2021
VINAYKANTH V MUDIAM	10/19/2021
DANIEL LORINGER	10/12/2021
PEDRO LOPES	11/22/2021
VINAYAK TILAK	10/17/2021
JAMES ROBERT MISCHLER	11/09/2021
PATRICIA SUE LACY	09/29/2021
MICHAEL MAJEWSKI	10/12/2021
PRADHEEPRAM OTTIKUTTI	10/11/2021
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	TRANSPORTATION IP HOLDINGS, LLC
<b>Street Address:</b>	901 MAIN AVENUE
<b>City:</b>	NORWALK
<b>State/Country:</b>	CONNECTICUT
<b>Postal Code:</b>	06851
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17506863
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(314)584-4062
<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>	3145844080
<b>Email:</b>	docket@splglaw.com
<b>Correspondent Name:</b>	THE SMALL PATENT LAW GROUP, LLC
<b>Address Line 1:</b>	1423 STRASSNER DR, SUITE 100
<b>Address Line 4:</b>	BRENTWOOD, MISSOURI 63144

<b>ATTORNEY DOCKET NUMBER:</b>	WABP11529USCIP11 (383US4)
<b>NAME OF SUBMITTER:</b>	CHRISTOPHER R. CARROLL
<b>SIGNATURE:</b>	/Christopher R. Carroll/
<b>DATE SIGNED:</b>	12/07/2021

**Total Attachments: 14**

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**COMBINED DECLARATION AND GLOBAL ASSIGNMENT  
FOR UTILITY OR DESIGN PATENT APPLICATION**

As the below named inventors, we hereby declare that this declaration and assignment are directed to:

**Vehicle Monitoring System**

- ☐ the specification of which is attached hereto OR
- ☒ United States application or PCT international application number 17/506,863 filed on 21-October-2021, as amended on [date] (if applicable). (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 when known.)

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

We believe that we are original joint inventors of a claimed invention in the application.

We 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.

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

We 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 our obligations 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 Transportation IP Holdings, LLC (collectively “Wabtec”) and our employer), and/or for other good and valuable consideration of which we acknowledge receipt, we,

<b>Inventor First Name</b>	<b>Inventor Middle Name</b>	<b>Inventor Last Name</b>		<b>Residence Town</b>	<b>Residence State</b>	<b>Residence Country</b>
Cesar		Domingos	of	Contagem	MG	BR
Shawn		Gallagher	of	Erie	PA	US
Raghav	Shrikant	Kulkarni	of	Bangalore	KA	IN
Vinaykanth	V	Mudiam	of	Melbourne	FL	US

Neil	Xavier	Blythe	of	Erie	PA	US
Daniel		Loringer	of	Erie	PA	US
Pedro		Lopes	of	Contagem	MG	BR
Vinayak		Tilak	of	Hyderabad	TS	IN
James	Robert	Mischler	of	Lawrence Park	PA	US
Patricia	Sue	Lacy	of	Lawrence Park	PA	US
Michael		Majewski	of	Lawrence Park	PA	US
Pradheepam		Ottikkutti	of	Lawrence Park	PA	US

hereby sell and assign to:

Name of Company:	<i>Transportation IP Holdings, LLC</i>
Entity Type (optional):	<i>Delaware Limited Liability Company</i>
Address:	<i>901 Main Avenue, Norwalk, Connecticut, 06851 USA</i>

herein referred to as “Company,” its successors and assigns, our entire respective rights, titles, and interests in and to the invention and improvements made or conceived by us 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	16/532,600	06-August-2019	Vehicle Monitoring System
US	Utility	16/373,295	02-April-2019	Monitoring System For Detecting Degradation Of A Propulsion Subsystem
WO	Utility	PCT/US2018/030231	30-April-2018	Monitoring System For Detecting Degradation Of A Propulsion Subsystem
US	Utility	62/491,765	28-April-2017	Monitoring System For Detecting Degradation Of A Propulsion Subsystem

*(We 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, we 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 inventors/assignors potentially arising from any country's law on employee Invention or service Invention, or any other respective country law are addressed as follows:

- We acknowledge and understand that the rights to the Invention belong to Wabtec Corporation, or its subsidiary/designee.
- We acknowledge and agree that the Invention(s) were created in the normal course of our duties (sometimes referred to as *Inventions de mission attribuables*).
- We acknowledge and agree that our acceptance of the remuneration award associated with this declaration and assignment document is a full, fair and sufficient accounting of the currently known value, and this value is paid prior to the commercial exploitation of the Invention.
- To the extent allowed, we waive any right to future compensation in exchange for the present value of the remuneration award.
- We acknowledge and agree that we are unaware of any exceptional circumstances regarding the Invention.
- We acknowledge and agree that Wabtec's resources, support and knowledge were used in the creation of the Invention at the direction of Wabtec.
- We acknowledge and understand that Wabtec timely claims rights to the Invention.
- We 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, we agree that the terms set forth herein control and are applied to the extent allowable.

[Signature Blocks follow]

INVENTOR 1

Signature: Cesar Domingos

Date: 10/21/2021

Witnessed by: Vanessa Vitela Rocha  
Signature

Date: 10/21/2021

Vanessa Vitela Rocha  
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

\_\_\_\_\_  
Cesar Domingos

Date: \_\_\_\_\_

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

\_\_\_\_\_  
(Notary Public)

**INVENTOR 2**

Signature: Shawn Gallagher  
Shawn Gallagher

Date: 9/29/2021

Witnessed by: Angel O. Cederia  
Signature

Date: 9/29/2021

Angel O. Cederia  
Printed Name of Witness

Witnessed by: Leslie O. Trask  
Signature

Date: 9/29/2021

Leslie O. Trask  
Printed Name of Witness

**SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY**

\_\_\_\_\_  
Shawn Gallagher

Date: \_\_\_\_\_

STATE OF

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Seal

\_\_\_\_\_  
(Notary Public)

## INVENTOR 3

Signature: [Signature]  
 Raghav Shrikant Kulkarni

Date: 13 OCT 2021

Witnessed by: [Signature]  
 Signature

Date: 13 OCT 2021

HARSHA VARDHANA C.M  
 Printed Name of Witness

Witnessed by: [Signature]  
 Signature

Date: 12 OCT 2021

GIRI BAI  
 Printed Name of Witness

## SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY

\_\_\_\_\_  
 Raghav Shrikant Kulkarni

Date: \_\_\_\_\_

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Seal

\_\_\_\_\_  
 (Notary Public)



**INVENTOR 4**

Signature: \_\_\_\_\_

**Vinaykanth V Mudiam**

Date: \_\_\_\_\_

10/19/2021

Witnessed by: \_\_\_\_\_

Signature

Date: \_\_\_\_\_

10/19/2021

Printed Name of Witness

HAI NGUYEN

Witnessed by: \_\_\_\_\_

Signature

Date: \_\_\_\_\_

Printed Name of Witness

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\_\_\_\_\_  
**Vinaykanth V Mudiam**

Date: \_\_\_\_\_

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Seal

\_\_\_\_\_  
(Notary Public)

**INVENTOR 6**

Signature: \_\_\_\_\_/Daniel Loringe/\_\_\_\_\_ Date: \_\_10/12/2021\_\_\_\_\_  
**Daniel Loringe**

Witnessed by: \_\_\_\_\_ Date: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name of Witness

Witnessed by: \_\_\_\_\_ Date: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name of Witness

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\_\_\_\_\_  
**Daniel Loringe** Date: \_\_\_\_\_

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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*

\_\_\_\_\_  
(Notary Public)

(Notary Public)

**INVENTOR 7**

Signature: 

**Pedro Lopes**

Date: 11/22/2021

Witnessed by: \_\_\_\_\_ Date: \_\_\_\_\_

Signature

Printed Name of Witness

Witnessed by: \_\_\_\_\_ Date: \_\_\_\_\_

Signature

Printed Name of Witness

**SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY**

Date: \_\_\_\_\_

**Pedro Lopes**

STATE OF

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COUNTY OF

**PATENT**  
**REEL: 058321 FRAME: 0216**

INVENTOR 8

Signature: Vinayak Tilak  
Vinayak Tilak

Date: Oct-17-2021

Witnessed by: Debasish Mishra  
Signature

Date: Oct-17-2021

DEBASISH MISHRA  
Printed Name of Witness

Witnessed by: Ritik Biswas  
Signature

Date: Oct-18-2021

RTNIK BISWAS  
Printed Name of Witness

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\_\_\_\_\_  
Vinayak Tilak

Date: \_\_\_\_\_

STATE OF

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Seal

\_\_\_\_\_  
(Notary Public)

**INVENTOR 9**

Signature: James Robert Mischler  
James Robert Mischler

Date: 11/9/2021

Witnessed by: [Signature]  
Signature

Date: 11-9-2021

Shawn Jeppson  
Printed Name of Witness

Witnessed by: Tyler Yost  
Signature

Date: 11-9-2021

Tyler Yost  
Printed Name of Witness

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\_\_\_\_\_  
James Robert Mischler

Date: \_\_\_\_\_

STATE OF

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(Notary Public)

**INVENTOR 10**

Signature: Patricia Sue Lacy  
Patricia Sue Lacy

Date: 9-29-2021

Witnessed by: Brian Meyer  
Signature

Date: 9-29-2021

Brian Meyer  
Printed Name of Witness

Witnessed by: Chris Weser  
Signature

Date: 9-29-2021

Chris Weser  
Printed Name of Witness

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\_\_\_\_\_  
Patricia Sue Lacy

Date: \_\_\_\_\_

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\_\_\_\_\_  
(Notary Public)

INVENTOR 11

Signature: Michael Majewski  
Michael Majewski

Date: 10/12/2021

Witnessed by: Sigmund A. Majewski  
Signature

Date: 12 Oct. 2021

SIGMUND A. MAJEWSKI  
Printed Name of Witness

Witnessed by: Elizabeth Majewski  
Signature

Date: 10/12/2021

ELIZABETH MAJEWSKI  
Printed Name of Witness

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\_\_\_\_\_  
Michael Majewski

Date: \_\_\_\_\_

STATE OF

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Seal

\_\_\_\_\_  
(Notary Public)

**INVENTOR 12**

Signature:   
Pradheepam Ottikkutti

Date: 11 OCTOBER 2021

Witnessed by:   
Signature

Date: 11 OCTOBER 2021

ABHIJIT NARANARI PHADKE  
Printed Name of Witness

Witnessed by:   
Signature

Date: 11 OCTOBER 2021

Neha Tiwari  
Printed Name of Witness

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\_\_\_\_\_  
Pradheepam Ottikkutti

Date: \_\_\_\_\_

STATE OF

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