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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
VIVEK A. SUJAN	07/29/2014
KENNETH FOLLEN	07/28/2014
PHANI VAJAPEYAZULA	07/29/2014
AN WU	08/18/2014
HOWARD ROBERT FROST	12/05/2014

RECEIVING PARTY DATA

Name:	CUMMINS INTELLECTUAL PROPERTIES, INC.
Street Address:	1400 73RD AVENUE, N.E.
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55432
Name:	PACCAR, INC.
Street Address:	777 106TH AVENUE N.E.
City:	BELLEVUE
State/Country:	WASHINGTON
Postal Code:	98004
Name:	EATON CORPORATION
Street Address:	1111 SUPERIOR AVENUE
City:	CLEVELAND
State/Country:	OHIO
Postal Code:	44114

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15789286

CORRESPONDENCE DATA

Fax Number:

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: 202-672-5300

PATENT

REEL: 043915 FRAME: 0221 504604323

Email: lbuhs@foley.com, ipdocketing@foley.com

Correspondent Name: FOLEY & LARDNER LLP Address Line 1: 3000 K STREET N.W.

Address Line 2: SUITE 600

Address Line 4: WASHINGTON, D.C. 20007-5109

ATTORNEY DOCKET NUMBER:	106389-4794		
NAME OF SUBMITTER:	ALEXANDER J. NEUWORTH		
SIGNATURE:	/Alexander J. Neuworth/		
DATE SIGNED:	10/20/2017		

Total Attachments: 6

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> PATENT REEL: 043915 FRAME: 0222

ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

Cummins Intellectual Properties, Inc. 1400 73rd Avenue, N.E. Minneapolis, Minnesota 55432

PACCAR, Inc. 777 106th Avenue N.E. Bellevue, Washington 98004

Eaton Corporation 1111 Superior Avenue Cleveland, Ohio 44114

(hereinafter referred to singly and collectively as "ASSIGNEE") its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions, and all foreign countries in and to this invention relating to

SYSTEM AND METHOD OF VEHICLE TRANSIENT TORQUE MANAGEMENT

as set forth in this	United States Patent Application
	1748

check one	- {] executed concurrent	y herewith.
	£] executed on	
	[X	. Serial No. <u>14/199414</u>	Filed March 6, 2014

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the Patent Cooperation Treaty, the Paris Convention and any other international agreement; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

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4823-3046-4024.1

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in any or all countries on the above-identified invention or inventions in the name of the undersigned or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable under the International Convention or otherwise.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States or a country foreign thereto; (e) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, and declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of **Foley & Lardner LLP** the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of Foley & Lardner LLP do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

Executed this 29th day of JULY	. 2014.
	- Uch Suzw
State of INOIAM)	VIVÆKÅ. SUJAN
County of BARING (4 . 2
On this 27 day of 2017 before for said county), personally appeared VIVAK A 3UJAN, who proved to a subscribed to the within instrument and acknowledged to me that he/she e signature on the instrument the person, or the entity upon behalf of which	me on the basis of satisfactory avidence to be the person whose name is secuted the same in his/her authorized capacity, and that by his/her
WITNIES my hand and official seal	
My Commission Expires: April 30, 202'	JANET ANN BALZER Notary Public- Seal State of Indiana
My Commission Expires:	My Commission Expires Apr 30, 2021
. See See See See See See See See See Se	
Executed this <u>JB</u> day of <u>JJY</u>	, 20 <u>14_</u> ,
報	Rin July
State of INDIANA	KENNETH FOLLEN
County of BARTHOLOMEN)	3
20	
On this 28 day of JULY 2014 before for said county), personally appeared KENNETH FOLLEN, who proved to is subscribed to the within instrument and acknowledged to me that be signature on the instrument the person, or the entity upon behalf of which	is me on the basis of satisfactory evidence to be the person whose name executed the same in his/her authorized capacity, and that by his/her
for said county), personally appeared KENNETH FOLLEN, who proved to is subscribed to the within instrument and acknowledged to me that he/she signature on the instrument the person, or the entity upon hehalf of which WITNESS my hand and official seat.	to me on the basis of satisfactory evidence to be the person whose name executed the same in his/her authorized capacity, and that by his/her the person acted, executed the instrument.
for said county), personally appeared KENNETH FØLLEN, who proved to subscribed to the within instrument and acknowledged to me that he/she signature on the instrument the person, or the entity upon behalf of which	to me on the basis of satisfactory evidence to be the person whose name executed the same in his/her authorized capacity, and that by his/her

Executed this 29 day of	Juu	L	20 <u>14</u> .	
		9 20 20 20 20 20 20 20 20 20 20 20 20 20	Y-Rh	
State of <u>Two iana</u>)			PHANI VAJAPEY	(AZULA
Country of BAKNING MEN On this 29 day of July for said country), personally appeared PHANI VAJAPES name is subscribed to the within instrument and acknow his/her signature on the instrument the person, or the en	razuta ledged to	, who proved to me that he/she	o rn e on the basis of sanistactory evic executed the same in his/her author	tence to be the person whose ized capacity, and that by
WITNESS my band and official scal Signature Devel Type By My Commission Expires: April 20, 2521			JANET ANN BALZ Notary Public- Si State of Indiana My Commission Expires A	ER eal s pr 30, 2021
Executed this day of	 		20	
		***************************************	AN WU	etti ale tauureetaliili 1770.aasod aleerie 18678laikk
State of)		¥		
County of)				
On thisday of	e/she excu	outed the same	in his/her authorized capacity, and the	
WITNESS my hand and official seal				
Signature	Haridann			
My Commission Expires:				

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Executed thisday of	. 20
w w	
	PHANI VAJAPEYAZULA
State of)	
County of)	
On thisday of20be for said county), personally appeared PHANI VAJAPEYAZULA, who name is subscribed to the within instrument and acknowledged to me it his/her signature on the instrument the person, or the entity upon behalf	to notary public in and proved to me on the basis of satisfactory evidence to be the person whose hat he/she executed the same in his/her authorized capacity, and that by Fof which the person acted, executed the instrument.
WITNESS my band and official seal.	
Signature	
My Commission Expires:	
State of Indiana	LOCOS AN WU
County of Bartholomew)	å.
for said county), personally appeared AN WD, who proved to me on th	fore me. One-We have to be the person whose name is subscribed the same in his/her authorized capacity, and that by his/her signature on the led, executed the instrument
WITNESS my hand and official scal Signature Cormie for Spriessig	
My Commission Expires: 5/7/2021	
CONNIE JO SPROESSIG Notery Public, State of Indiana Bartholomew County Commission # 644253 My Commission Expires May 07, 2021	

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RECORDED: 10/20/2017