505721815 10/14/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RAYMOND J. HAKA	06/05/2018
KRISHNA KUMAR	02/08/2016
STEVEN J. WESOLOWSKI	06/05/2018
JAMES F. ZIECH	06/05/2018

RECEIVING PARTY DATA

Name:	DANA HEAVY VEHICLE SYSTEMS GROUP, LLC
Street Address:	3939 TECHNOLOGY DRIVE
Internal Address:	PO BOX 1000
City:	MAUMEE
State/Country:	OHIO
Postal Code:	43537

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15781807

CORRESPONDENCE DATA

Fax Number: (419)249-7151

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: 419-2497138

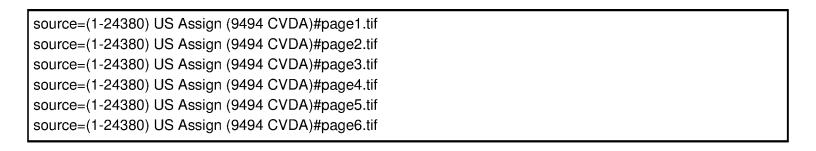
Email:moore@marshall-melhorn.comCorrespondent Name:MARSHALL & MELHORN, LLCAddress Line 1:FOUR SEAGATE - 8TH FLOOR

Address Line 2: STEPHEN P. EVANS TOLEDO, OHIO 43604

ATTORNEY DOCKET NUMBER:	1-24380/9494 CVDA
NAME OF SUBMITTER:	STEPHEN P. EVANS
SIGNATURE:	/Stephen P. Evans/
DATE SIGNED:	10/14/2019
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Total Attachments: 6

PATENT REEL: 050707 FRAME: 0571



PATENT REEL: 050707 FRAME: 0572

ASSIGNMENT OF INVENTION

For: x U.S. and/or Foreign Rights

For: \overline{x} U.S. Application

By: x Inventor(s) or Present Owner

For good and valuable consideration, the receipt of which is hereby acknowledged, and further acknowledging the assignment of this invention recorded in the U.S. Patent and Trademark Office on October 13, 2016, and October 24, 2016, and, for the avoidance of doubt, hereby confirming such assignments,

ASSIGNORS:	Inventors or persons or entities who own the invention
Raymond J. Haka	U.S.
7837 Partridge Hill Drive	Nationality
Brighton, Michigan 48116	
United States of America	
Krishna Kumar	India
7420 Nightingale Drive	Nationality
Holland, Ohio 43528	
United States of America	
Steven J. Wesolowski	<u>u.s.</u>
8089 Silverstone Drive	Nationality
Waterville, Ohio 43566	
United States of America	
James F. Ziech	U.S.
705 Wynding Oaks	Nationality
Kalamazoo, Michigan 49006	
United States of America	
hereby sell, assign and transfer to	
ASSIGNEE:	
DANA HEAVY VEHICLE SYSTEMS	U.S an Ohio Limited Liability Company
GROUP, LLC	Nationality
3939 Technology Drive	<u> </u>
PO Box 1000	
Maumee, Ohio 43537	
United States of America	<u></u>

and the successors, assigns and legal representatives of the ASSIGNEE, their entire right, title and interest, for the United States and its territorial possessions, and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled: Distributed Drivetrain Architectures for Commercial Vehicles with a Hybrid Electric Powertrain and Dual Range Disconnect Axles which is found in U.S. patent application No. 15/781,807 filed on June 6, 2018 under 35 USC 371 of International Application No. PCT/US2016/065285 filed December 7, 2016, which claims priority of U.S. provisional application No. 62/264,089 filed on December 7, 2015, and 62/406,126 filed on October 10, 2016.

X To comply with 37 CFR 3.21 for recordal of this assignment, We/l, the Assignor(s) signing below, hereby authorize and request my/our attorney to insert the filing date and application number when they become known.

and any legal equivalent thereof in a foreign country, including the right to claim priority, and in and to, all Letters Patent to be obtained for said invention by the above application, for the United States of America and its territorial possessions and any other foreign country or countries that may be granted to them therefor, and any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof:

ASSIGNORS agree that this Assignment may be executed in one or more counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to constitute one and the same instrument.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment;

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

	ASSIGNORS
Date: 6-5-18	RAYMOND J. HAKA
Date:	KRISHNA KUMAR
Date:	STEVEN J. WESOLOWSKI
Date:	JAMES F. ZIECH

NOTE: No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized, then it will only be prima facie evidence of execution. 35 U.S.C. 261.

	ASSIGNORS
Date:	RAYMOND J. HAKA
	KATINIONID J. HAKA
Date: y 02/08/2017	X KRISHNA KUMAR
Date:	STEVEN J. WESOLOWSKI
Date:	IAMES E ZIECH

NOTE: No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized, then it will only be prima facie evidence of execution. 35 U.S.C. 261.

	ASSIGNORS
Date:	RAYMOND J. HAKA
Date:	KRISHNA KUMAR
Date: 5 June 2018	Steven J. Wesolowski STEVEN J. WESOLOWSKI
Date:	JAMES F. ZIECH

No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized, then it will only be prima facie evidence of execution. 35 U.S.C. 261.

NOTE:

Docket No. 1-24380/9494 CVDA

	ASSIGNORS
Date:	RAYMOND J. HAKA
Date:	KRISHNA KUMAR
Date:	STEVEN J. WESOLOWSKI
Date: 5 June 2018	James F. Ziech

No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized, then it will only be prima facie evidence of execution. 35 U.S.C. 261.

NOTE: