PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5580464

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
OLAF ENKE	05/31/2019
BRIAN A. KUNKEL	06/10/2019

RECEIVING PARTY DATA

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Street Address:	500 NORTH FIELD DRIVE
City:	LAKE FOREST
State/Country:	ILLINOIS
Postal Code:	60045

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16445964

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Address Line 4: GRAND RAPIDS, UNITED STATES 49503

ATTORNEY DOCKET NUMBER:	PA-2018-01276US01
NAME OF SUBMITTER:	JOHN F. COLLIGAN
SIGNATURE:	/John F. Colligan/
DATE SIGNED:	06/19/2019

Total Attachments: 4

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PATENT REEL: 049522 FRAME: 0302

505533667

Attorney No.: PA-2018-01276US01

ASSIGNMENT

WHEREAS, the undersigned, hereinafter referred to collectively as Assignors, are about to make or have made the following patent applications:

VALVE ASSEMBLY

for which Ass	ignor is a	about to make or has made United States or International application for patent
(a)		executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration);
(b)		executed on or
(c)		filed on, and assigned Serial No or PCT International Application

WHEREAS, Tenneco Automotive Operating Company Inc., 500 North Field Drive, Lake Forest, IL, USA, hereinafter referred to as Assignee, is desirous of acquiring all right, title, and interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignors hereby confirm any prior assignment to Assignee, and to the extent that Assignors have not already done so, agree to assign, and hereby do, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues. reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignors had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights.

Assignors hereby covenant and agree to 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, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, any derivation proceedings relating thereto, and as to Letters Patent any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, and for litigation regarding, or for the purpose of defending the validity of or protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee and its successors in interest without further or other compensation than that above set forth.

Attorney No.: PA-2018-01276US01

Assignors hereby covenant that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment.

Assignors further covenant not to challenge, or assist or participate in any third party challenge to, the assigned inventions, or any patent application or patent thereon, whether by litigation, post grant review, inter partes review, covered business method review, reexamination, or otherwise.

Assignors hereby request the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and request that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

Assignors hereby grant the law firm of <_____> the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

Olaf Enke

Dated

Witness 1 Signature:

Witness 1 Printed Name:

Witness 2 Signature:

Witness 2 Printed Name:

Mad Del

Attomey No.: PA-2018-01276US01

ASSIGNMENT

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(b)		executed on,; or
(c)		filed on, and assigned Serial No or PCT International Application No; and

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NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged. Assignors hereby confirm any prior assignment to Assignee, and to the extent that Assignors have not already done so, agree to assign, and hereby do, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignors had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights.

Assignors hereby covenant and agree to 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, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, any derivation proceedings relating thereto, and as to Letters Patent any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, and for litigation regarding, or for the purpose of defending the validity of or protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee and its successors in interest without further or other compensation than that above set forth.

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Assignors hereby grant the law firm of <______> the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

Brian A. Kunkel 6/10/14

Dated

Witness 1

Signature:

Witness 1 Printed Name:

Witness 2

Signature:

Witness 2 Printed Name:

DAVID 1

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