

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT																		
NATURE OF CONVEYANCE:	ASSIGNMENT																		
CONVEYING PARTY DATA																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr><td>Ryan A. Floyd</td><td>08/01/2011</td></tr> <tr><td>Stephen M. Thomas</td><td>08/01/2011</td></tr> <tr><td>Joseph G. Ralph</td><td>08/01/2011</td></tr> <tr><td>James J. Reynolds III</td><td>08/16/2011</td></tr> <tr><td>Jeremy Popovich</td><td>08/16/2011</td></tr> <tr><td>Manoj K. Sampath</td><td>08/17/2011</td></tr> <tr><td>Michael Wenk</td><td>08/30/2011</td></tr> <tr><td>Alison Chambers</td><td>07/29/2011</td></tr> </tbody> </table>		Name	Execution Date	Ryan A. Floyd	08/01/2011	Stephen M. Thomas	08/01/2011	Joseph G. Ralph	08/01/2011	James J. Reynolds III	08/16/2011	Jeremy Popovich	08/16/2011	Manoj K. Sampath	08/17/2011	Michael Wenk	08/30/2011	Alison Chambers	07/29/2011
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RECEIVING PARTY DATA																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">Name:</td><td>Tenneco Automotive Operating Company Inc.</td></tr> <tr><td>Street Address:</td><td>500 North Field Drive</td></tr> <tr><td>City:</td><td>Lake Forest</td></tr> <tr><td>State/Country:</td><td>ILLINOIS</td></tr> <tr><td>Postal Code:</td><td>60045</td></tr> </table>		Name:	Tenneco Automotive Operating Company Inc.	Street Address:	500 North Field Drive	City:	Lake Forest	State/Country:	ILLINOIS	Postal Code:	60045								
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CORRESPONDENCE DATA																			
Fax Number: (248)641-0270 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 248-641-1600 Email: docketingpt@hdp.com Correspondent Name: HARNESS, DICKEY & PIERCE, P.L.C. Address Line 1: P.O. BOX 828 Address Line 4: BLOOMFIELD HILLS, MICHIGAN 48303																			
ATTORNEY DOCKET NUMBER:	2001U-001698/US																		

CH \$40.00 13227952

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PATENT
REEL: 026873 FRAME: 0662

NAME OF SUBMITTER:

Donald G. Walker

Total Attachments: 4

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ASSIGNMENT

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

PRE-INJECTION EXHAUST FLOW MODIFIER

for which Assignor is 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 09/08/2011, and assigned Serial No. 13/227,952 or PCT International Application No. _____; and

WHEREAS, Tenneco Automotive Operating Company Inc., 500 North Field Drive, Lake Forest, IL 60045, 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, Assignor hereby confirms any prior assignment to Assignee, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, 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 Assignor 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;

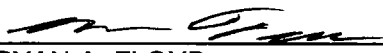
Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of 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 without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests 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.

The undersigned hereby grant(s) the law firm of Harness, Dickey & Pierce, P.L.C. 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.

ASSIGNMENT



RYAN A. FLOYD

8/1/11

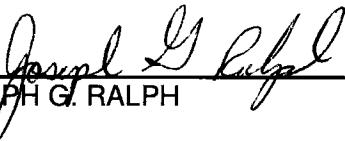
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STEPHEN M. THOMAS

8/1/2011

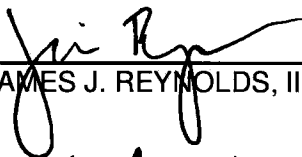
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JOSEPH G. RALPH

8-1-11

Dated



JAMES J. REYNOLDS, III

16-Aug-11

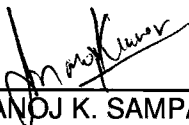
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JEREMY POPOVICH

8/16/2011

Dated



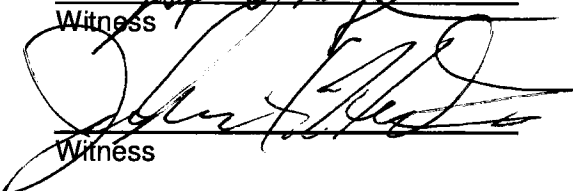
MANOJ K. SAMPATH

8/17/2011

Dated



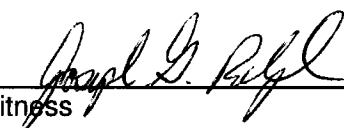
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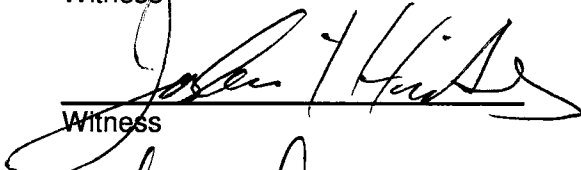
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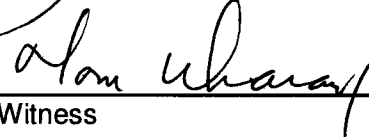
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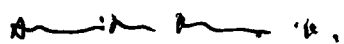
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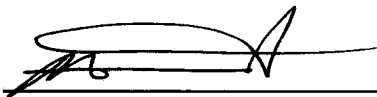
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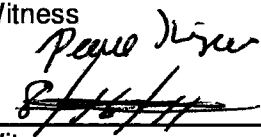
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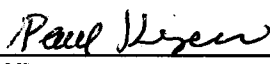
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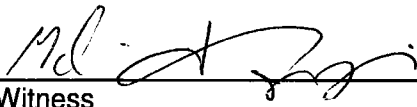
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Witness



Witness

ASSIGNMENT

Michael Wenk
MICHAEL WENK

8/30/2011
Dated

ALISON CHAMBERS

Dated

Christina M. Hulse
Witness

Steven W. Woodard
Witness

Witness

Witness

16208207.1

ASSIGNMENT

MICHAEL WENK

Witness

Dated

Witness



ALISON CHAMBERS



Witness

7/29/2011

Dated



Witness

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