

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4220416

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
STEPHEN THOMAS	10/28/2016
MATTHEW L. ROESSLE	10/07/2016
RICK SIMPSON	10/10/2016
ERIC GRANT	07/04/2010
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	TENNECO AUTOMOTIVE OPERATING COMPANY INC.
<b>Street Address:</b>	500 NORTH FIELD DRIVE
<b>City:</b>	LAKE FOREST
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	60045
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14641820
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(248)641-0270
<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>	2486411600
<b>Email:</b>	troydocketing@hdp.com,jgrazia@hdp.com
<b>Correspondent Name:</b>	HARNES, DICKEY & PIERCE, P.L.C.
<b>Address Line 1:</b>	P.O. BOX 828
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<b>ATTORNEY DOCKET NUMBER:</b>	1316E-000007-US-CPF
<b>NAME OF SUBMITTER:</b>	DONALD G. WALKER
<b>SIGNATURE:</b>	/Donald G. Walker/
<b>DATE SIGNED:</b>	01/11/2017
<b>Total Attachments: 5</b>	
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**DECLARATION AND ASSIGNMENT<sup>1</sup>**

The undersigned acknowledges that this document is being used both as an assignment of the invention and as the declaration (37 CFR 1.63) for a Utility or Design Application entitled:

**ELECTROMAGNETICALLY CONTROLLED INJECTOR  
HAVING FLUX BRIDGE AND FLUX BREAK**

As a below named inventor, I hereby declare that:

This declaration is directed to (check one):

- The attached application, or
- United States application or PCT International application number 14/641,820 filed on March 9, 2015.

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

I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-identified application.

I hereby acknowledge that any willful false statement made in this Declaration and Assignment is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims.

I acknowledge that I am aware of the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

For good and valuable consideration, the receipt and adequacy whereof I hereby acknowledge, I hereby confirm any prior assignment to TENNECO AUTOMOTIVE OPERATING COMPANY INC., 500 North Field Drive, Lake Forest, IL 60045 (hereinafter "Assignee"), and to the extent that I 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

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<sup>1</sup> This form requires an ADS if one has not yet been filed.

**DECLARATION AND ASSIGNMENT**

laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the above-identified application, to the above-identified application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the above-identified 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 me 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.

I 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 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.

I hereby covenant that I have not made and will not make any assignment, sale, license, agreement or encumbrance which would conflict with this Declaration and Assignment.

I 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.

**DECLARATION AND ASSIGNMENT**

I hereby grant the law firm of Harness, Dickey & Pierce, P.L.C. the power to insert on this Declaration and 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.

Stephen M Thomas  
Stephen Thomas  
10/28/2016  
Dated

Matthew L Roessle  
Matthew L. Roessle  
10/7/16  
Dated

Rick Simpson  
Rick Simpson  
10/10/2016  
Dated

\_\_\_\_\_  
Eric Grant  
  
\_\_\_\_\_  
Dated

19480699.1

[Signature]  
Witness  
[Signature]  
Witness

[Signature]  
Witness  
Craig Markbrecht  
Witness

Matthew Roessle  
Witness  
Cory [Signature]  
Witness

\_\_\_\_\_  
Witness  
  
\_\_\_\_\_  
Witness

**TENNECO  
INVENTIONS, IMPROVEMENTS AND DISCOVERIES,  
AND PROPRIETARY INFORMATION AGREEMENT**

THIS AGREEMENT, made in Grass Lake/Jackson, MI, on 07/04/2010.

By and between Eric Grant (hereinafter referred to as "Employee") and Tenneco, Inc., a Delaware corporation, on behalf of itself, its subsidiaries and its affiliates (collectively hereinafter referred to as the "Company").

WITNESSETH:

In recognition of the well established principle that inventions, improvements of design, or other discoveries made by an employee and that relate to the employer's operation become the property of the employer, it is agreed by and between the parties hereto as follows:

I

Employee is presently employed by the Company, and the Employee agrees that he/she will devote his/her time, skill, knowledge, and best efforts during the period of his/her employment to such duties as may be reasonably assigned to him/her, he/she will faithfully and diligently endeavor to further the best interests of the Company during the period of said employment, and he/she will, consistent with his/her assigned duties and to the extent he/she may, make and perfect inventions and discoveries which are useful in or related to the business of the Company. Employee hereby represents and warrants to the Company that Employee is not currently bound by any competition or confidentiality covenants, or any other employment agreement, that would prohibit Employee from performing such obligations.

II

Employee agrees that he/she will not at any time, either during or subsequent to his/her employment, disclose to others, or use, except for the Company, its successors, assigns or nominee, any secret, confidential or proprietary information or know-how of the Company (whether or not developed by the Employee) without the Company's prior written consent. The term "secret, confidential or proprietary information and know-how of the Company" shall include, but shall not be limited to, the Company's plans, customers, costs, prices, uses and applications of products, results of investigations or experiments, and all apparatus, products, processes, compositions, samples, formulas, computer programs and manufacturing methods at any time used, developed, investigated, made, or sold by the Company, before or during the Employee's tenure of employment. Employee further agrees to deliver to the Company at the termination of his/her employment all correspondence, memoranda, notes, records, drawings, sketches, plans, customer lists, product compositions, or other documents and all copies thereof, made by, composed by, or delivered to Employee and which are in Employee's possession or control at such date and which are related in any way to the business and operations of the Company. The provisions of this Agreement are separate and apart from and are not in lieu of applicable federal statutes and regulations for controlling United States Government Classified information.

III

Employee agrees to hold in complete trust for the benefit of the Company, and to disclose promptly and fully to the Company in writing, and to assign to the Company, if so requested, any and all inventions, discoveries, and improvements made, discovered, or developed by him/her, solely or jointly with others, during the term of his/her employment by the Company and which relate in any manner to the business of

the Company. Any and all such inventions, discoveries, or improvements shall be the sole and exclusive property of the Company, whether patentable or not, and Employee agrees that he/she will assist and fully cooperate in every proper way, at the employer's expense, in securing and enforcing, for the Company's sole benefit, patents for such inventions, discoveries, or improvements in any and all countries. Within one year following the termination of the Employee's employment and without limiting the generality of the foregoing, any invention, discovery, or improvement of the Employee relating to the Company subject matter on which Employee worked on or gained knowledge of during his/her employment by the Company shall be conclusively presumed to have been conceived and made prior to the termination of his/her employment unless the Employee clearly proves that such invention, discovery, or improvement was conceived and made following the termination of his/her employment.

IV

Employee agrees at the request of the Company (but without additional compensation from the Company) to execute any and all papers and perform all lawful acts which the Company deems necessary for the preparation, filing, prosecution, and maintenance of applications for United States patent and foreign letters patent on said inventions, discoveries, or improvements, and to execute such instruments as are necessary to assign to the Company, its successors, assigns or nominee, all of the Employee's right, title, and interest in said inventions, discoveries, or improvements and the like, so as to establish or perfect, in the Company, its successors, assigns or nominee, the entire right, title, and interest to said inventions, discoveries, and improvements, and also to execute any instruments necessary or which the Company may deem desirable in connection with any continuation, renewal, or reissue thereof, or in the conduct of any proceedings or litigation in regard thereto. All expenses incurred by the Employee by reason of the performance of any of the obligations set forth in this paragraph IV shall be borne by the Company.

V

Employee attaches hereto, concurrently with the execution hereof, a list and brief description of all unpatented inventions and discoveries, if any, made or conceived by him/her prior to his/her employment by the Company and which are to be excluded from this Agreement. If no such list is attached at the time of execution of this Agreement, it shall be conclusively presumed that Employee has waived any right he/she may have to any such invention or discovery, which relates to the Company's business. This Agreement is made under and entered into as of the date and the place herein above written and the rights and obligations of the parties hereto shall be construed under the laws of the state in which the Company is domiciled and shall be binding upon the heirs, legal representatives, and assigns of the Employee and the successors and assigns of the Company. With respect to the subject matter hereof, this instrument is the entire agreement between the Employee and the Company superseding any previous oral or written communication, understanding, or agreement with the Company or any official representative thereof. It is agreed that this agreement does not constitute a contract of employment and does not alter the at-will nature of employee's employment at the Company; employment of the Employee is not for a definite period of time and continuance of such employment is not hereby made obligatory upon either party, or as a condition thereof.

WITNESS:

Teodoro Tello

Tenneco, Inc.

Eric Grant

