504831612 03/22/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JIA LI	03/16/2018
ISAO HODA	03/16/2018
HIROKI FUNATO	03/16/2018

RECEIVING PARTY DATA

Postal Code:	312-8503
State/Country:	JAPAN
City:	IBARAKI
Street Address:	2520, TAKABA, HITACHINAKA-SHI,
Name:	HITACHI AUTOMOTIVE SYSTEMS, LTD.

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15928321

CORRESPONDENCE DATA

Fax Number: (703)684-1157

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: 703-684-1120

Email: svannarath@mmiplaw.com **Correspondent Name:** MATTINGLY & MALUR, PC Address Line 1: 1800 DIAGONAL ROAD

Address Line 2: **SUITE 210**

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER: H-11278 NAME OF SUBMITTER: COLIN D. BARNITZ SIGNATURE: /Colin D. Barnitz/ **DATE SIGNED:** 03/22/2018

Total Attachments: 4

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> **PATENT** REEL: 045313 FRAME: 0154 504831612

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PATENT REEL: 045313 FRAME: 0155

ASSIGNMENT

As a below named inventor, I hereby declare that:

VEHICULAR ELECTROMAGNETIC INTERFERENCE SUPPRESSION

(hereinafter referred to as the "Application") and the inventions and improvements (such inventions and improvements hereinafter referred to collectively as the "Inventions"), invented by me (if only one inventor is named below) or us (if plural inventors are named below) and described in the Application, executed on even date herewith and/or described above, and all United States letters patent which may be granted therefor, and all provisional applications, non-provisional applications, divisions, continuations, substitutes, renewals, reissues, reexaminations, or extensions thereof, including any international applications and including any foreign applications, foreign letters patent, or equivalents thereof in countries foreign to the United States, said interest including the entire ownership of said United States letters patent, foreign letters patent, or equivalents thereof, when granted, to be held and enjoyed by said ASSIGNEE, its successors, assigns or other legal representatives, to the full end of term for which said letters patents or equivalents may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby covenant and agree to execute and deliver to ASSIGNEE, its successors, assigns and/or legal representatives, all documents or instruments that may be required, necessary, or desirable in connection with the filing, prosecution, litigation, maintenance, enforcement, and defense of the Application or in the preparation and prosecution of any continuing, continuation in part, substitute, divisional, renewal, reissue, foreign application, extension, or in any amendment, interference proceeding, post-grant proceeding, or for litigation regarding said letters patent, or for the purpose of otherwise securing or protecting the title to the Inventions and/or the letters patent and equivalents therefor for said ASSIGNEE, all without further consideration from ASSIGNEE;

And I agree to, without requesting or receiving additional consideration from ASSIGNEE, but at ASSIGNEE's expense, identify and communicate to ASSIGNEE, its successors, assigns and/or legal representatives all facts known to me relating to the Inventions and the history thereof, and to provide further assurances and testimony on behalf of ASSIGNEE, its successors, assigns and/or legal representatives that lawfully may be required, necessary, or desirable in respect to the filing, prosecution, litigation, maintenance, enforcement, and defense of any patent application or letters patent or equivalent encompassed within the terms of this Assignment, and further agree that my obligations under this Assignment shall extend to my heirs, executors, administrators, and legal representatives;

And I hereby covenant and agree that no assignment, grant, mortgage, license, or other agreement encumbering the rights and property herein conveyed has been made to others by me, and that the full right to convey the same as expressed herein is possessed by me or us;

And I hereby authorize and request the Commissioner for Patents of the United States and any official of any country or countries foreign to the United States whose duty it is to issue letters patent or similar legal rights on applications aforesaid, to issue all such letters patent or similar rights for the Inventions to the ASSIGNEE, as assignee of the entire right, title and interest in and to the same, for the ASSIGNEE's own use and benefit, and for the use and benefit of the ASSIGNEE's successors, assigns and

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legal representatives, to the full end of the term for which such letters patent or similar rights may be granted, as fully and entirely as the same would have been held and enjoyed by me or us had this assignment not been made;

Whereby, I hereby grant the law firm of MATTINGLY & MALUR, PC, the legal representatives of the ASSIGNEE, the power to insert on this Assignment any further identification which may be necessary or desirable for recordation of this document, including inserting the application serial number and filing date when known.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

IN WITNESS WHEREOF, I/We have signed this Assignment as of the date(s) indicated below:

Inventor	Date Signed
	3/16/2018
Inventor	Date Signed
Isao HODA	
inventor	Date Signed
Hiroki FUNATO	

ASSIGNMENT

As a below named inventor, I hereby declare that:

VEHICULAR ELECTROMAGNETIC INTERFERENCE SUPPRESSION

(hereinafter referred to as the "Application") and the inventions and improvements (such inventions and improvements hereinafter referred to collectively as the "Inventions"), invented by me (if only one inventor is named below) or us (if plural inventors are named below) and described in the Application, executed on even date herewith and/or described above, and all United States letters patent which may be granted therefor, and all provisional applications, non-provisional applications, divisions, continuations, substitutes, renewals, reissues, reexaminations, or extensions thereof, including any international applications and including any foreign applications, foreign letters patent, or equivalents thereof in countries foreign to the United States, said interest including the entire ownership of said United States letters patent, foreign letters patent, or equivalents thereof, when granted, to be held and enjoyed by said ASSIGNEE, its successors, assigns or other legal representatives, to the full end of term for which said letters patents or equivalents may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby covenant and agree to execute and deliver to ASSIGNEE, its successors, assigns and/or legal representatives, all documents or instruments that may be required, necessary, or desirable in connection with the filing, prosecution, litigation, maintenance, enforcement, and defense of the Application or in the preparation and prosecution of any continuing, continuation in part, substitute, divisional, renewal, reissue, foreign application, extension, or in any amendment, interference proceeding, post-grant proceeding, or for litigation regarding said letters patent, or for the purpose of otherwise securing or protecting the title to the Inventions and/or the letters patent and equivalents therefor for said ASSIGNEE, all without further consideration from ASSIGNEE;

And I agree to, without requesting or receiving additional consideration from ASSIGNEE, but at ASSIGNEE's expense, identify and communicate to ASSIGNEE, its successors, assigns and/or legal representatives all facts known to me relating to the Inventions and the history thereof, and to provide further assurances and testimony on behalf of ASSIGNEE, its successors, assigns and/or legal representatives that tawfully may be required, necessary, or desirable in respect to the filing, prosecution, litigation, maintenance, enforcement, and defense of any patent application or letters patent or equivalent encompassed within the terms of this Assignment, and further agree that my obligations under this Assignment shall extend to my heirs, executors, administrators, and legal representatives;

And I hereby covenant and agree that no assignment, grant, mortgage, license, or other agreement encumbering the rights and property herein conveyed has been made to others by me, and that the full right to convey the same as expressed herein is possessed by me or us;

And I hereby authorize and request the Commissioner for Patents of the United States and any official of any country or countries foreign to the United States whose duty it is to issue letters patent or similar legal rights on applications aforesaid, to issue all such letters patent or similar rights for the Inventions to the ASSIGNEE, as assignee of the entire right, title and interest in and to the same, for the ASSIGNEE's own use and benefit, and for the use and benefit of the ASSIGNEE's successors, assigns and

Page 1 of 2

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IN WITNESS WHEREOF, I/We have signed this Assignment as of the date(s) indicated below:

Inventor	Date Signed
Jia L.I	
Inventor	Date Signed
Claus Hoda	3/16/18
Inventor	Date Signed
Jarohi Famato Hiroki FUNATO	3/16/2018

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