

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4711636

|                              |                |
|------------------------------|----------------|
| <b>SUBMISSION TYPE:</b>      | NEW ASSIGNMENT |
| <b>NATURE OF CONVEYANCE:</b> | ASSIGNMENT     |

**CONVEYING PARTY DATA**

| Name               | Execution Date |
|--------------------|----------------|
| RYOSUKE HIYOSHI    | 10/10/2017     |
| YOSHIAKI TANAKA    | 10/10/2017     |
| YOSHIHIDE KIYOSAWA | 10/05/2017     |
| JUN HANDA          | 10/05/2017     |
| KISHIRO NAGAI      | 10/05/2017     |
| JUNICHIRO ONIGATA  | 10/10/2017     |
| YOSHIHIKO YAMADA   | 10/10/2017     |

**RECEIVING PARTY DATA**

|                        |                                  |
|------------------------|----------------------------------|
| <b>Name:</b>           | NISSAN MOTOR CO., LTD.           |
| <b>Street Address:</b> | 2, Takara-cho, Kanagawa-ku       |
| <b>City:</b>           | Yokohama-shi, Kanagawa           |
| <b>State/Country:</b>  | JAPAN                            |
| <b>Postal Code:</b>    | 221-0023                         |
| <b>Name:</b>           | HARMONIC DRIVE SYSTEMS INC.      |
| <b>Street Address:</b> | 25-3, MINAMIOI 6-CHOME           |
| <b>City:</b>           | SHINAGAWA-KU, TOKYO              |
| <b>State/Country:</b>  | JAPAN                            |
| <b>Postal Code:</b>    | 140-0013                         |
| <b>Name:</b>           | HITACHI AUTOMOTIVE SYSTEMS, LTD. |
| <b>Street Address:</b> | 2520, TAKABA                     |
| <b>City:</b>           | HITACHINAKA-SHI, IBARAKI         |
| <b>State/Country:</b>  | JAPAN                            |
| <b>Postal Code:</b>    | 312-8503                         |

**PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 15578432 |

**CORRESPONDENCE DATA**

Fax Number: (202)672-5399

***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:** 2026725300  
**Email:** rhale@foley.com, ipdocketing@foley.com  
**Correspondent Name:** FOLEY AND LARDNER LLP SUITE 500  
**Address Line 1:** 3000 K STREET NW  
**Address Line 4:** WASHINGTON, D.C. 20007

|                                |                                                            |
|--------------------------------|------------------------------------------------------------|
| <b>ATTORNEY DOCKET NUMBER:</b> | 023971-1002                                                |
| <b>NAME OF SUBMITTER:</b>      | EFFIE HALE FOR GLENN LAW                                   |
| <b>SIGNATURE:</b>              | /Effie Hale/                                               |
| <b>DATE SIGNED:</b>            | 11/30/2017                                                 |
|                                | This document serves as an Oath/Declaration (37 CFR 1.63). |

**Total Attachments: 9**

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COMBINED ASSIGNMENT AND DECLARATION

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred and by these presents hereby sells, assigns, and transfers, unto

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2520, Takaba, Hitachinaka-shi, Ibaraki 312-8503 Japan

(hereinafter referred to as "ASSIGNEE") its successors and assigns, his or her full and exclusive right, title and interest for the United States, its territories and possessions, in and to the invention relating to

VARIABLE COMPRESSION RATIO MECHANISM FOR INTERNAL COMBUSTION ENGINE

as set forth in the following patent application(s):

|       |                                     |                                                                                                                  |
|-------|-------------------------------------|------------------------------------------------------------------------------------------------------------------|
| check | <input type="checkbox"/>            | the attached application                                                                                         |
| one   | <input checked="" type="checkbox"/> | U.S. application or PCT international application number<br><u>PCT/JP2016/062729</u> filed <u>April 22, 2016</u> |

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application(s), all applications claiming priority to the above-identified application(s), and all applications to which the above-identified application(s) claim priority, and all other applications for Letters Patent of the United States for the above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the Patent Cooperation Treaty, the Paris Convention for the Protection of Industrial Property and any other international agreement associated with said applications, all applications claiming priority to said application(s), and all applications to which said application(s) claim priority; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may

be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY further sells and assigns to ASSIGNEE any and all claims for damages by way of past, present and future infringement of any of the rights stemming from the aforementioned patent application(s) and patent(s), as well as but not limited to the right to collect damages and royalties for infringement occurring from the date of publication of any said application(s), with the right, but not the obligation, to sue for and collect such damages and royalties for said infringement

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in the United States on the above-identified invention in the name of the ASSIGNOR or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks for the United States to issue each said U.S. Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, review, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, declarations, and depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of FOLEY & LARDNER LLP do not represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE. Since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

#### INVENTOR DECLARATION FOR U.S. PATENT APPLICATION

As a below named inventor, I HEREBY DECLARE:

THAT this declaration is directed to:

check ☐ the attached application  
one ☒ U.S. application or PCT international application number  
PCT/JP2016/062729 filed April 22, 2016

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

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

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

| NAMES AND SIGNATURES OF INVENTORS |                                      |                                  |
|-----------------------------------|--------------------------------------|----------------------------------|
| Name:<br>Ryosuke HIYOSHI          | Signature:<br><i>Ryosuke Hiyoshi</i> | Date:<br><i>October 10, 2017</i> |
| Name:<br>Yoshiaki TANAKA          | Signature:<br><i>Yoshiaki Tanaka</i> | Date:<br><i>October 10, 2017</i> |
| Name:<br>Yoshihide KIYOSAWA       | Signature:                           | Date:                            |
| Name:<br>Jun HANDA                | Signature:                           | Date:                            |
| Name:<br>Kishiro NAGAI            | Signature:                           | Date:                            |
| Name:<br>Junichiro ONIGATA        | Signature:                           | Date:                            |
| Name:<br>Yoshihiko YAMADA         | Signature:                           | Date:                            |

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check  
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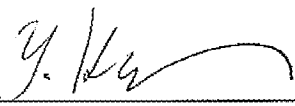
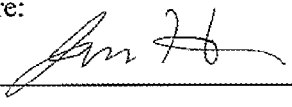
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|-----------------------------------|----------------------------------------------------------------------------------------------------|---------------------|
| Name:<br>Ryosuke HIYOSHI          | Signature:                                                                                         | Date:               |
| Name:<br>Yoshiaki TANAKA          | Signature:                                                                                         | Date:               |
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| Name:<br>Kishiro NAGAI            | Signature:<br><i>Kishiro Nagai</i>     | Date:<br><i>10/5/2017</i>  |
| Name:<br>Junichiro ONIGATA        | Signature:<br><i>Junichiro Onigata</i> | Date:<br><i>10/10/2017</i> |
| Name:<br>Yoshihiko YAMADA         | Signature:<br><i>Yoshihiko Yamada</i>  | Date:<br><i>10/10/2017</i> |