505199385 11/20/2018

PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT | |
|-----------------------|----------------|--|
| NATURE OF CONVEYANCE: | ASSIGNMENT | |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| MR. JASON HOON LEE | 09/25/2018 |
| SEJUN KIM | 09/25/2018 |
| KWANGWOO JEONG | 09/25/2018 |
| BYUNGHO LEE | 09/25/2018 |

RECEIVING PARTY DATA

| Name: | HYUNDAI MOTOR COMPANY | |
|-----------------|-----------------------------|--|
| Street Address: | 12, HEOLLEUNG-RO, SEOCHO-GU | |
| City: | SEOUL | |
| State/Country: | KOREA, REPUBLIC OF | |
| Postal Code: | 06797 | |
| Name: | KIA MOTORS CORPORATION | |
| Street Address: | 12, HEOLLEUNG-RO, SEOCHO-GU | |
| City: | SEOUL | |
| State/Country: | KOREA, REPUBLIC OF | |
| Postal Code: | 06797 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 16196326 | |

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 048299-942F01US PETER F. CORLESS NAME OF SUBMITTER:

PATENT REEL: 047553 FRAME: 0677 505199385

| SIGNATURE: | GNATURE: /Peter F. Corless/ | |
|--|-----------------------------|--|
| DATE SIGNED: | 11/20/2018 | |
| Total Attachments: 3 source=assign#page1.tif source=assign#page2.tif source=assign#page3.tif | | |

PATENT REEL: 047553 FRAME: 0678

ASSIGNMENT BY INVENTORS

WHEREAS, Assignors have invented certain new and useful improvements in METHOD AND SYSTEM FOR CONTROLLING ACTIVATION OF VEHICLE ENGINE IDLE STOP AND GO, set forth in a Patent application for Letters Patent of the United States, filed herewith; and

WHEREAS, Hyundai Motor Company and Kia Motors Corporation, a and, respectively organized under and pursuant to the laws of and, respectively having their principal places of business at 12, Heolleung-ro, Seocho-gu, Seoul, REPUBLIC OF KOREA 06797; and 12, Heolleung-ro, Seocho-gu, Seoul, REPUBLIC OF KOREA 06797, respectively (hereinafter referred to as Assignees), are desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, in consideration of good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignees, their successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignees, for their own use and benefit and the use and benefit of their successors, legal representatives and assigns, to the full end of the term or terms for which

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Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignees, their successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignees under law or that have already been transferred to Assignees, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignees, their successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignees, their successors, legal representatives and assigns, whenever counsel of Assignees, or counsel of their successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner for Patents and Trademarks to issue said Letters Patent of the United States to Assignees, as Assignees of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignees, their successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply

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with the rules of the United States Patent and Trademark Office for recordation of this document:

MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO, P.C.

All practitioners at Customer Number 100807

AND Assignors acknowledge an obligation of assignment of this invention to Assignees at the time the invention was made.

| Date: | 9/25/2018 | Signature: | Jason Hoon Lee |
|-------|-----------|------------|------------------|
| Date: | 9/27/2018 | Signature: | NB (m) Sejun Kim |
| Date: | 9/25/2018 | Signature: | Kwangwoo Jeong |
| Date: | 9/25/2018 | Signature: | Bruncho Lee |

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