## 504113444 11/29/2016

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
JAEHYUK CHOI	11/22/2016
WOO YOUNG LEE	11/22/2016
MR. SEOK JOON KIM	11/22/2016
JONG PIL KIM	11/22/2016
MR. SAM GYUN KIM	11/22/2016
GUN WOO MOON	11/28/2016
HAN SHIN YOUN	11/28/2016
JAE BUM LEE	11/28/2016
JAE IL BAEK	11/28/2016

### **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		
Name:	KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY		
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State/Country:	KOREA, REPUBLIC OF		
Postal Code:	34141		

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15363061

#### **CORRESPONDENCE DATA**

PATENT REEL: 040449 FRAME: 0463

504113444

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ATTORNEY DOCKET NUMBER: 48299-827001US

NAME OF SUBMITTER: PETER F. CORLESS

SIGNATURE: /Peter F. Corless/

DATE SIGNED: 11/29/2016

#### **Total Attachments: 6**

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PATENT REEL: 040449 FRAME: 0464

# COMBINED ASSIGNMENT & DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION

### **ASSIGNMENT**

THIS ASSIGNMENT, made this	day of	, <u>2016</u> , by
(1) Jaehyuk CHOI. (2) Woo Young LEE, (3) S	Seok Joon KIM, (4) Jon	g Pil KIM. (5) Sam Gyun
KIM, (6) Gun Woo MOON, (7) Han Shin YOU	UN, (8) Jae Bum LEE, (	9) Jae Il BAEK (hereinafte
referred to as Assignor), residing at #102-508.	37, Cheonho-daero 193	3-gil, Gangdong-gu, Seoul,
Korea #306-405, 67, Songok-ro, Suji-gu, Yong	gin-si, Gyeonggi-do, Ko	orea, #305-1101, 73,
Jeongpyeong-ro, Suji-gu, Yongin-si, Gyeongg	i-do, Korea, #811-1101	, 180, Byeoryang-ro,
Gwacheon-si, Gyeonggi-do, Korea, #437-100	1, 70, Dongtanbanseok-	ro, Hwaseong-si,
Gyeonggi-do, Korea, 291 Daehak-ro, Yuseong	g-gu, Daejeon, Korea, 2	91 Daehak-ro, Yuseong-gu
Daejeon, Korea, 291 Daehak-ro, Yuseong-gu,	Daejeon, Korea, 291 D	aehak-ro, Yuseong-gu,
Daejeon, Korea.		
WHERE AS, Assignor has invented co	ertain new and useful in	nprovements in <u>DC-DC</u>
CONVERTER AND CONTROL METHOD I	THEREOF, set forth in a	a Patent application for
Letters Patent of the United States, already file	ed on	_ as U.S. Application No.
· and		

WHERE AS, HYUNDAI MOTOR COMPANY, a corporation organized under and pursuant to the laws of the Republic of Korea, having its principal place of business at 12. Heolleung-ro, Seocho-gu, Seoul, Republic of Korea; KIA MOTORS CORPORATION, a corporation organized under and pursuant to the laws of the Republic of Korea, having its principal place of business at 12, Heolleung-ro, Seocho-gu, Seoul, Republic of Korea; KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY, , a corporation organized under and pursuant to the laws of the Republic of Korea, having its principal place of business at 291 Daehak-ro, Yuseong-gu, Daejeon 34141, Republic of Korea (hereinafter referred to as Assignee), is 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.

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NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and by these presents does sell, assign, transfer and set over, unto Assignee, its 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 Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.

AND for the same consideration, Assignor hereby represents and warrants to Assignee, its 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 Assignee under law or that have already been transferred to Assignee, Assignor is the sole and lawful owner 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 Assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignor hereby covenants and agrees to and with Assignee, its successors, legal representatives and assigns, that Assignor 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 Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its 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 Assignor hereby requests the Commissioner for Patents and Trademarks to

issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the

Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal

representatives and assigns.

AND Assignor acknowledges an obligation of assignment of this invention to Assignee at the

time the invention was made.

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PATENT REEL: 040449 FRAME: 0467

### **DECLARATION**

As a below named inventor, I hereby declare that:

This declaration is directed to the patent application entitled:

DC-DC CONVERTER AND CONTROL METHOD THE	<u>KEUF</u>
the specification of which was filed on	_ as Application No
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 invention in the application.	entor of a claimed
I have reviewed and understand the contents of the above-iden	tified application.
I am aware of the duty to disclose to the Office all information material to patentability as defined in 37 C.F.R. 1.56.	known to me to be
I hereby acknowledge that any willful false statement made in punishable under 18 U.S.C. 1001 by fine or imprisonment of not more that both.	

In the event that the filing date and/or Application No. are not entered above at the time I execute this document, and if such information is deemed necessary, I hereby authorize and request the attorneys/agent(s) at Mintz Levin Cohn Ferris Glovsky and Popeo, P.C., One Financial Center, Boston, Massachusetts 02111, to insert the filing date and/ or Application No. of said application into this document.

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	Jachyrk CHOI
Date: Nov. 22, 2016	Jachyuk CHOI
Date: Nov. 22, 2016	Woo Young LEE
Date	¢
· · · · · · · · · · · · · · · · · · ·	Seok Joan KIM
Date Nov. 22, 2016	
	Jong Pil KIM
Date: Nov. 30. 3-016	Jong Ph Kem
	San Gyun KIM
Nov. 22,2016	Sam Gyun KIM

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Gun Woo MOON

Han Shin YOUN

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**RECORDED: 11/29/2016**