# 503625493 12/28/2015

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3672125

NATURE OF CONVEYA		NEW ASSIGNMENT		
	NCE:	ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ			
		Name	Execution Date	
JAE MOON LEE			12/01/2015	
SANG JIN KIM			12/01/2015	
JONG TAE CHOI			12/01/2015	
CHANG HEE LEE			12/01/2015	
RECEIVING PARTY DA				
Name:	ne: DOOSAN ENGINE CO., LTD.			
Street Address:	18, GON	18, GONGDAN-RO 21BEON-GIL, SEONGSAN-GU, CHANGWON-SI		
City:	GYEON	GYEONGSANGNAM-DO		
State/Country:	KOREA	, REPUBLIC OF		
Postal Code:	51561			
PROPERTY NUMBERS	; Total: 1	Number		
Property Type Application Number:		14901167		
		4901107		
CORRESPONDENCE D	ΑΤΑ			
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Phone:		248-649-3333		
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Correspondent Name			C	
•		MICHELLE L. KNIGHT C/O YOUNG BASIL	.E	
Address Line 1:	З		E	
Address Line 1: Address Line 2:	3	MICHELLE L. KNIGHT C/O YOUNG BASIL 3001 WEST BIG BEAVER ROAD	E	
Address Line 1: Address Line 2: Address Line 4:	3 5 T	MICHELLE L. KNIGHT C/O YOUNG BASIL 8001 WEST BIG BEAVER ROAD SUITE 624	E	
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Address Line 1: Address Line 2: Address Line 4: TTORNEY DOCKET N IAME OF SUBMITTER:	3 5 T	MICHELLE L. KNIGHT C/O YOUNG BASIL 8001 WEST BIG BEAVER ROAD SUITE 624 FROY, MICHIGAN 48084 HANB-101-A	.E	
ATTORNEY DOCKET NU NAME OF SUBMITTER: SIGNATURE:	3 5 T	MICHELLE L. KNIGHT C/O YOUNG BASIL 8001 WEST BIG BEAVER ROAD SUITE 624 FROY, MICHIGAN 48084 HANB-101-A MICHELLE L. KNIGHT	E	
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Address Line 1: Address Line 2:	3 5 7 <b>UMBER:</b>	MICHELLE L. KNIGHT C/O YOUNG BASIL 8001 WEST BIG BEAVER ROAD SUITE 624 TROY, MICHIGAN 48084 HANB-101-A MICHELLE L. KNIGHT /Michelle L. Knight/ 12/28/2015	.E	

#### Any, Doc. No. HANB-101-A

#### ASSIGNMENT AND AGREEMENT

WHEREAS, we, Jae Moon Lee, Sang Jin Kim, Jong Tae Choi, and Chang Hee Lee, all of Gyeongsangnam-do, 51561, Republic of Korea (hereinafter referred to as "ASSIGNOR"), have invented a certain invention entitled REDUCING AGENT PYROLYSIS SYSTEM FOR SELECTIVE CATALYTIC REDUCTION APPARATUS as set forth in this United States Patent Application,

- executed concurrently herewith
- □ executed on
- Serial No. 14/901,167 Filed December 28, 2015

WHEREAS, Doosan Engine Co., Ltd., a company of the Republic of Korea having a place of business at 18, Gongdan-ro 21beon-gil, Seongsan-gu, Changwon-si, Gyeongsangnamdo, 51561, Republic of Korea (hereinafter referred to as "ASSIGNEE"), desires to acquire the entire right, title, and interest in and to said invention;

NOW THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto ASSIGNEE, its successors and assigns, the full and exclusive right, title, and interest in and to (a) the above-identified invention or inventions and all improvements and modifications thereof, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for the above-identified inventions and all improvements and modifications and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (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 International Convention and any other international agreement to which the United States adheres; 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 AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said 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 representatives 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, 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 or a country foreign thereto; (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, depositions and (d) to provide all reasonable

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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 and countries foreign thereto.

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 HEREBY GRANTS to the law firm of Young Basile Hanlon & MacFarlane, P.C. the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the informeys and agents of the law firm of Young Basile Hanlon & MacFarlane, P.C. do not personally 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.

NAME(S) AND SIGNATURE OF ASSIGNOR					
Name: Jae Moon Lee	Signature: 0/ ZM B	Date: 15. 12.1			
Name: Sang Jin Kim	Signature: SS	Date: 15.12. 1			
Name: Jong Tae Choi	Signature:	Date: 15.12 - L			
Name: Chang Hee Lee	Signature: Charghec le	e Date: / [ 12. ]			

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