504721875 01/10/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT	
CONVEYING PARTY	DATA			
		Name	Execution Date	
TONY J. HALL			06/05/2015	
JOSEPH A. HUDSON	J		07/06/2015	
RECEIVING PARTY [DATA			
Name:	CUMM	CUMMINS INC.		
Street Address:	500 JA	500 JACKSON STREET		
City:	COLUN	COLUMBUS		
State/Country:	INDIAN	INDIANA		
Postal Code:	47201	47201		
PROPERTY NUMBER Property Typ		Number		
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Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will</i>	De E DATA If be sent to if provided e: NUMBER:	15550956 (317)237-1000 o the e-mail address first; if that is unsuc d; if that is unsuccessful, it will be sent v 317-237-0300 Cummins.IP@FaegreBD.com ROBERT D. NULL / MICKIE POTTER 300 NORTH MERIDIAN STREET SUITE 2400 INDIANAPOLIS, INDIANA 46204 CI-14-0532-02-US		

	Attomey Docket No.: C1-14-0532-01-US Page 1 of 2		
ASSIGNMENT	First Named Inventor: Tony J. Hall		
ADDIGIVITEIVI	Title: SYSTEM AND METHOD TO DETECT AND RESPOND TO ICED SENSORS IN EXHAUST AFTER-TREATMENT SYSTEM		

WHEREAS, we. Tony J. Hall, residing at 3710 Rte, 430, Bemus Point, New York 14712 and Joseph A. Hudson, residing at 4741 Juniper Court. Columbus, Indiana 47201, have invented certain new and useful improvements as described in U.S. Patent Application No. 62/167,779, filed on May 28, 2015, entitled SYSTEM AND METHOD TO DETECT AND RESPOND TO ICED SENSORS IN EXHAUST AFTER-TREATMENT SYSTEM; and

WHEREAS, **CUMMINS INC.**, a limited liability company of the State of Indiana having an address at 500 Jackson Street, Columbus, IN 47201, United States of America ("Assignee"), is desirous of acquiring the entire right, title and interest in and to the invention, U.S. Patent Application No. 62/167.779, and any and all Letters Patent or similar legal protection, foreign or domestic, to be obtained therefor,

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, we, the inventors and assignors, transfer to Assignee, its successors and assigns, our entire right, title, and interest in and to the invention, the above-identified patent application, corresponding domestic applications (including divisionals, continuations, and continuations-in-part), corresponding foreign applications, all Letters Patent or similar legal protection issuing thereon, and all rights and benefits under any applicable treaty or convention; and we authorize the Commissioner of Patents and Trademarks of the United States or foreign equivalent thereof to issue the Letters Patent or similar legal protection to the Assignee.

We authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all countries.

We represent to the Assignee, its successors and assigns, that we have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. We, or our executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries.

Tony J. Hall Date <u>6~5~15</u>

State of New York 3 County of <u>Unantangua</u>

Subscribed and sworn to (or affirmed) before me on this 5^{+15} day of $-\frac{1}{1000}$ day of 2015, by **Tony J. Hall**, proved to me on the basis of satisfactory evidence to be the person who appeared before me.

Signature 82221

(Seal) Lori L. Fisherton Notory Politic, Crits of New York No. c076873 Qualified to Chautsurgua County & Commission Expires Dec. 23,200

Attorney Docket No.: CI-14-0532-01-US Page 2 of 2 First Named Inventor: Tony J. Hall Title: SYSTEM AND METHOD TO DETECT AND RESPOND TO ICED SENSORS IN EXHAUST AFTER-TREATMENT SYSTEM

sh a Gudson Joseph A. Hudson Date 7/6/15

State of Indiana) County of Darthobnew)

Subscribed and sworn to (or affirmed) before me on this $\frac{26^{44}}{3000}$ day of 3000 day of appeared before me.

signature Kombert & H man (Seal



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RECORDED: 01/10/2018