PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KRISTOPHER R. BARE	06/03/2021
KENNETH M. FOLLEN	06/03/2021
XING JIN	06/03/2021
JINYONG LUO	06/03/2021
MANIK NARULA	10/27/2022
ANDREW W. OSBURN	11/08/2022
ANANT PURI	11/03/2022
XIAOBO SONG	06/03/2021
YING YUAN	10/27/2022

RECEIVING PARTY DATA

Name:	CUMMINS INC.
Street Address:	500 JACKSON STREET
City:	COLUMBUS
State/Country:	INDIANA
Postal Code:	47201

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	17337016	

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: kschwalbach@foley.com, ipdocketing@foley.com

FOLEY & LARDNER LLP Correspondent Name: Address Line 1: 3000 K STREET, N.W.

Address Line 2: SUITE 600

Address Line 4: WASHINGTON, D.C. 20007

ATTORNEY DOCKET NUMBER: 106389-6470 KATIE SCHWALBACH NAME OF SUBMITTER:

SIGNATURE:	/Katie Schwalbach/		
DATE SIGNED:	03/07/2023		
Total Attachments: 11			
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ASSIGNMENT - WORLDWIDE

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

Cummins Inc. 500 Jackson Street Columbus, Indiana 47201

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

SYSTEMS AND METHODS FOR REDUCING EMISSIONS WITH SMART ALTERNATOR

as set forth in	this United States Patent Application			
check one	 [] executed concurrently herewith, [] executed on [X] Serial No. 17/337,016 	, Filed _	06/02/2021	

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto 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 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 Patent Cooperation Treaty, the Paris Convention and any other international agreement; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in any or all countries on the above-identified invention or inventions in the name of the undersigned or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable under the Patent Cooperation Treaty, the Paris Convention, any other international agreement, or otherwise.

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.

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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, 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, and declarations, 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 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 **Foley & Lardner LLP** 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 attorneys and agents of the law firm of **Foley & Lardner LLP** 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: KRISTOPHER R. BARE

Signature 1472 KBC Date: 6/3/2

Name: KENNETH M FOLLEN

Signature: 14-27 144. Date: 6/3/201

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Name:	XING JIN				
Signature:	Sig Ji	Date:	08/03/2021		

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Name: JINYONG LUO

Signature: Date: 6/3/2021

Any, Dkr. No. 106389-6470

NAME AND SIGNATURE OF INVENTOR

Name:

MANIK NARULA

Signature:

(Byour ya

Date: 10/27/2022

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4839-9901-5404.1

Name: ANDREW W. OSBURN

Name: <u>ANANT PURI</u>

Signature (Vouly) Date: Nov-3-2022

Name: XIAOBO SONG

Signature: Wados Jong Date: 6/3/8021

Name:	YING YUAN	<u> </u>		
Signature:	<u> </u>		Date:	10/27/2022

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