PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6580392

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUBBARAO DAKSHINA MURTHY BELLUR	09/18/2019
THOMAS A. DOLLMEYER	09/25/2019
JENNIFER RUMSEY	09/19/2019
BRADFORD K. PALMER	09/19/2019

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:	17169898

CORRESPONDENCE DATA

Fax Number: (317)713-3699

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: 13177133500

Email: Taft-IP-Docket@taftlaw.com

Correspondent Name: JASON A. HOUDEK

Address Line 1: TAFT STETTINIUS & HOLLISTER LLP

Address Line 2: SUITE 3500

Address Line 4: INDIANAPOLIS, INDIANA 46204-2023

ATTORNEY DOCKET NUMBER:	CECO-01880	
NAME OF SUBMITTER:	LISA SCHODROWSKI	
SIGNATURE:	/Lisa Schodrowski/	
DATE SIGNED:	03/03/2021	

Total Attachments: 6

source=FULLY Executed Assignment CECO-1601#page1.tif source=FULLY Executed Assignment CECO-1601#page2.tif

PATENT 506533616 REEL: 055471 FRAME: 0465

source=FULLY Executed Assignment CECO-1601#page3.tif
source=FULLY Executed Assignment CECO-1601#page4.tif
source=FULLY Executed Assignment CECO-1601#page5.tif
source=FULLY Executed Assignment CECO-1601#page6.tif

COMBINED DECLARATION AND ASSIGNMENT OF PATENT RIGHTS

WHEREAS, the below-named persons (hereinafter referred to as "Assignors" or "Inventors") have made one or more new and useful inventions which are claimed, disclosed and/or described in the patent application identified in Section I. below (hereinafter collectively referred to as "the Invention");

WHEREAS, Cummins Inc. (hereinafter referred to as "Assignee") a legal entity organized under the laws of Indiana, desires to acquire the entire right, title and interest in, to and under the Invention and any and all United States, foreign and international patent applications and patents which claim, disclose and/or describe the Invention; and

NOW, THEREFORE, for good, valuable and sufficient consideration to the Assignors, the receipt and sufficiency of which are hereby acknowledged, Assignors and Assignee agree as follows:

I. DECLARATION

As one of the below-named Inventors I hereby declare that:

This declaration is directed to the application entitled INVERTER-BASED EXHAUST AFTERTREATMENT THERMAL MANAGEMENT APPARATUSES, METHODS, SYSTEMS, AND TECHNIQUES which:

__ is attached hereto, or

X was filed as Application No. PCT/US18/58319 on October 31, 2018.

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 inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

II. ASSIGNMENT OF PATENT RIGHTS

A. Assignment of Patent Rights

Assignors hereby assign and transfer to Assignee, its successors and assigns, the entire right, title, and interest in, to and under (i) the Invention, (ii) any and all United States, foreign and international patent applications which claim, disclose or describe the Invention including, without limitation, the application identified in Section I. above, (iii) any and all continuations, continuations-in-part, divisionals, foreign counterparts, reexaminations, reissues, extensions and applications claiming the benefit of or priority to any of the foregoing, (iv) any and all rights to claim priority to any of the foregoing, and (v) any and all rights to bring an action under, receive and collect damages for infringement of any of the foregoing and/or obtain injunctive relief for infringement of any of foregoing (hereinafter collectively referred to as "the Assigned Patent Rights").

Assignors acknowledge and agree that the Assigned Patent Rights include any and all future applications not filed at the time of execution of this agreement which disclose, describe and/or claim subject matter of the Invention, or which claim priority to or the benefit of an

23815951.1

application or patent which discloses, describes and/or claims subject matter of the Invention. With respect to such future applications, Assignors hereby authorize Assignee, its counsel, or its agents to append information identifying such applications as an Exhibit A to this document at the discretion of Assignee, its attorneys, or its agents.

B. Agreement to Execute Additional Documents and Provide Further Assistance

Assignors agree to execute any and all other documents necessary or desirable to document, memorialize or perfect Assignee's interest in the Assigned Patent Rights and to execute any and all other documents and to provide any further assistance necessary or desirable for the procurement of patent rights on the above referenced invention in the United Sates and all foreign countries.

C. Binding, Complete and Enforceable Agreement

Assignors acknowledge that (i) this is an enforceable agreement; (ii) this agreement embodies the entire and only understanding between Assignors and Assignee with respect to the subject matter of this agreement; (iii) no oral explanation or oral information by either party hereto shall alter the meaning or interpretation of this agreement; and (iv) if any provision of this agreement is held to be unlawful or unenforceable, such provision shall be limited or eliminated to the minimum extent necessary so that the remainder of this agreement will continue in full force and effect and be enforceable.

D. Execution

This agreement may be executed in counterparts or duplicate originals, both of which shall be regarded as one and the same instrument, and which shall be the official and governing version in the interpretation of this agreement. This agreement may be executed by facsimile signatures or other electronic means and such signatures shall be deemed binding as if they were original signatures.

[Signature Pages Follow]

EXECUTED this 18 r #day of Sep	TEMBER, 2019.
Huth B.S.D.	
Subbarao Dakshina Murthy Bellur	
EXECUTED this 25 day of 5	,2019.
Thomas A. Dollmeyer	
EXECUTED this day of	, 2019.
Jennifer W. Rumsey	
EXECUTED this 19 mday of Seq	Tember, 2019.
Ort to Palm	
Bradford K. Palmer	

COMBINED DECLARATION AND ASSIGNMENT CECO-1619/ 18-0314-EBU Page 3 23815951-1

COMBINED DECLARATION AND ASSIGNMENT OF PATENT RIGHTS

WHEREAS, the below-named persons (hereinafter referred to as "Assignors" or "Inventors") have made one or more new and useful inventions which are claimed, disclosed and/or described in the patent application identified in Section I. below (hereinafter collectively referred to as "the Invention");

WHEREAS, Cummins Inc. (hereinafter referred to as "Assignee") a legal entity organized under the laws of Indiana, desires to acquire the entire right, title and interest in, to and under the Invention and any and all United States, foreign and international patent applications and patents which claim, disclose and/or describe the Invention; and

NOW, THEREFORE, for good, valuable and sufficient consideration to the Assignors, the receipt and sufficiency of which are hereby acknowledged, Assignors and Assignee agree as follows:

I. DECLARATION

As one of the below-named Inventors I hereby declare that:

This declaration is directed to the application entitled INVERTER-BASED EXHAUST AFTERTREATMENT THERMAL MANAGEMENT APPARATUSES, METHODS, SYSTEMS, AND TECHNIQUES which:

is attached hereto, or

X was filed as Application No. PCT/US18/58319 on October 31, 2018.

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 inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

II. ASSIGNMENT OF PATENT RIGHTS

A. Assignment of Patent Rights

Assignors hereby assign and transfer to Assignee, its successors and assigns, the entire right, title, and interest in, to and under (i) the Invention, (ii) any and all United States, foreign and international patent applications which claim, disclose or describe the Invention including, without limitation, the application identified in Section I. above, (iii) any and all continuations, continuations-in-part, divisionals, foreign counterparts, reexaminations, reissues, extensions and applications claiming the benefit of or priority to any of the foregoing, (iv) any and all rights to claim priority to any of the foregoing, and (v) any and all rights to bring an action under, receive and collect damages for infringement of any of the foregoing and/or obtain injunctive relief for infringement of any of foregoing (hereinafter collectively referred to as "the Assigned Patent Rights").

Assignors acknowledge and agree that the Assigned Patent Rights include any and all future applications not filed at the time of execution of this agreement which disclose, describe and/or claim subject matter of the Invention, or which claim priority to or the benefit of an

23815951.1 1

application or patent which discloses, describes and/or claims subject matter of the Invention. With respect to such future applications, Assignors hereby authorize Assignee, its counsel, or its agents to append information identifying such applications as an Exhibit A to this document at the discretion of Assignee, its attorneys, or its agents.

B. Agreement to Execute Additional Documents and Provide Further Assistance

Assignors agree to execute any and all other documents necessary or desirable to document, memorialize or perfect Assignee's interest in the Assigned Patent Rights and to execute any and all other documents and to provide any further assistance necessary or desirable for the procurement of patent rights on the above referenced invention in the United Sates and all foreign countries.

C. <u>Binding, Complete and Enforceable Agreement</u>

Assignors acknowledge that (i) this is an enforceable agreement; (ii) this agreement embodies the entire and only understanding between Assignors and Assignee with respect to the subject matter of this agreement; (iii) no oral explanation or oral information by either party hereto shall alter the meaning or interpretation of this agreement; and (iv) if any provision of this agreement is held to be unlawful or unenforceable, such provision shall be limited or eliminated to the minimum extent necessary so that the remainder of this agreement will continue in full force and effect and be enforceable.

D. Execution

This agreement may be executed in counterparts or duplicate originals, both of which shall be regarded as one and the same instrument, and which shall be the official and governing version in the interpretation of this agreement. This agreement may be executed by facsimile signatures or other electronic means and such signatures shall be deemed binding as if they were original signatures.

[Signature Pages Follow]

2

EXECUTED this	day of	, 2019.
Subbarao Dakshina N	Murthy Bellur	
EXECUTED this	day of	, 2019.
Thomas A. Dollmeye	er er	
EXECUTED this 10	day of Scple	mber, 2019.
0012	<u> </u>	
Jennikr W. Rumsey		
EXECUTED this	day of	, 2019.

COMBINED DECLARATION AND ASSIGNMENT CECO-1619/ 18-0314-EBU Page 3 23815951.1

RECORDED: 03/03/2021

Bradford K. Palmer