504097198 11/15/2016

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MING-FENG HSIEH	11/07/2016
ANDREW G. KITCHEN	11/14/2016
AXEL OTTO ZUR LOYE	11/07/2016
JINGHUA ZHONG	11/07/2016
RICHARD A. BOOTH	11/02/2016
ROBERT J. THOMAS	11/14/2016
JISANG SUN	11/07/2016

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:	15351721

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: 317-713-3500

Email: taft-ip-docket@taftlaw.com

Correspondent Name: TAFT STETTINIUS & HOLLISTER LLP

Address Line 1: JASON HOUDEK

Address Line 2: ONE INDIANA SQUARE, STE. 3500
Address Line 4: INDIANAPOLIS, INDIANA 46204-2023

ATTORNEY DOCKET NUMBER:	CECO-1396
NAME OF SUBMITTER:	LISA SCHODROWSKI
SIGNATURE:	/LISA SCHODROWSKI/
DATE SIGNED:	11/15/2016

Total Attachments: 10 source=2016-11-14 16-0007-SRC CECO-1396 Executed Declaration Assignment#page1.tif source=2016-11-14 16-0007-SRC CECO-1396 Executed Declaration Assignment#page2.tif source=2016-11-14 16-0007-SRC CECO-1396 Executed Declaration Assignment#page3.tif source=2016-11-14 16-0007-SRC CECO-1396 Executed Declaration Assignment#page4.tif source=2016-11-14 16-0007-SRC CECO-1396 Executed Declaration Assignment#page5.tif source=2016-11-14 16-0007-SRC CECO-1396 Executed Declaration Assignment#page6.tif source=2016-11-14 16-0007-SRC CECO-1396 Executed Declaration Assignment#page7.tif source=2016-11-14 16-0007-SRC CECO-1396 Executed Declaration Assignment#page8.tif source=2016-11-14 16-0007-SRC CECO-1396 Executed Declaration Assignment#page9.tif source=2016-11-14 16-0007-SRC CECO-1396 Executed Declaration Assignment#page9.tif

COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY AND DESIGN PATENT APPLICATIONS

DECLARATION

As a below named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

SPARK IGNITION ENGINE CONTROL WITH EXHAUST MANIFOLD PRESSURE SENSOR

the application of which is attached hereto.

The above-identified application was made or authorized to be made by me.

I hereby acknowledge that any willful false statement made in this declaration is punishable under section 1001 of title 18 by fine or imprisonment of not more than 5 years, or both.

ASSIGNMENT

WHEREAS, Ming-Feng Hsieh of 197 Deer Trails, Nashville, Indiana 47448; Andrew G.

Kitchen of 20 Bradbury Road, Newnham, Daventry, United Kingdom NN113HD; Axel Otto zur Loye of 1015 Tanbark Drive, Columbus, Indiana 47203; Jinghua Zhong of 929 S. Fenbrook Court, Bloomington, Indiana 47401; Richard A. Booth of 3432 Grove Place, Columbus, Indiana

47203; Robert J. Thomas of 6310 Jakes Place, Indianapolis, Indiana 46237; and Jisang Sun of

6082 Basswood Dr., Columbus, Indiana 47201, hereinafter referred to as Assignors, have made

one or more new and useful inventions in SPARK IGNITION ENGINE CONTROL WITH

EXHAUST MANIFOLD PRESSURE SENSOR for which Assignors have made or will make

an International patent application and/or application for Letters Patent of the United States

(hereinafter the "Applications"); and

COMBINED DECLARATION ASSIGNMENT CECO-1396/16-0007-SRC Page 1 of 9 17610486.1

WHEREAS, Cummins Inc., hereinafter referred to as Assignee, a corporation of the State

of Indiana, having a principal place of business at 500 Jackson Street, Columbus, Indiana 47201,

desires to acquire all of the entire right, title and interest in, to and under the one or more

inventions disclosed, described and claimed or intended so to be in the Applications, and in, to

and under the Applications, and in, to and under any and all Letters Patent, United States and

foreign, which may be obtained therefore and thereon;

NOW, THEREFORE, to all whom it may concern, be it known that for and in

consideration of the sum of One Dollar (\$1.00) and other good, valuable and sufficient

considerations to Assignors in hand paid, the receipt of which is hereby acknowledged,

Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer

unto Assignee, all of the entire right, title, and interest in, to and under the one or more

inventions disclosed, described and claimed or intended so to be in the Applications, and any and

all other applications thereon and arising therefrom, including any and all applications claiming

the benefit thereof, and any and all divisions, continuations, and continuations-in-part thereof,

and any and all patents to be issued and obtained therefor and thereon, United States and foreign,

including all reissues and extensions thereof.

Assignors hereby authorize Assignee, its counsel, or its agents to fill-in some or all of the

following list of information items (a) through (b) at the discretion of the Assignee, its counsel,

or its agents:

(a) Serial Number of the Application:

Filing Date of the Application: (b)

COMBINED DECLARATION ASSIGNMENT

Assignors hereby authorize and request the Honorable Assistant Secretary and Commissioner for Patents and Trademarks to issue said Letters Patent to Assignee, its assigns and legal representatives.

Assignors agree to assign and execute any and all other papers necessary or desirable for the procurement of Letters Patent on said invention in this and all foreign countries for the use of Assignee.

WITNESS Assignor's hand this	day of November , 2016.
	Ming-Feng Hsieh
STATE OF INDIANA	
COUNTY OF TACKSON):	SS

Before me, a Notary Public, in and for said County and State, personally appeared Ming-Feng Hsieh, who, being first duly sworn upon his oath, acknowledged the execution of the foregoing "Assignment" as his voluntary act and deed.

TERRY J. NEFF Notary Public- Seal State of Indiana My Commission Expires Apr 18, 2020	Notary Publi Printed: I	EPRY J. NEI	<i></i> :∙F
My Commission Expires:	Resident of	JACKEON	County
18-APR-2020			

COMBINED DECLARATION ASSIGNMENT CECO-1396/16-0007-SRC Page 3 of 9 17610486.1

WITNESS Assignor's hand this day of November, 2016.
A-6 litcle
Andrew G. Kitchen

Witness: John Kore Johnson

TOBY REECE JOHNSON (printed)

TOBY REECE JOHNSON
Notary Public - Seal
State of Indiana
Bartholomew County
My Commission Expires Sep 10, 2022

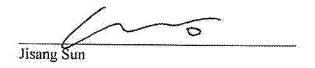
WITNESS Assignor's hand this 74 day of	November, 2016. Stal run Cocse Axel Otto zur Loye
	said County and State, personally appeared Axel on his oath, acknowledged the execution of the and deed.
TOBY REECE JOHNSON Notary Public - Seal State of Indiana Bartholomew County My Commission Expires Sep 10, 2022	this 7th day of November, 2016. They Reese Jahren Notary Public Printed: TOBY REECE TO HINSON
My Commission Expires: SEP. 10, 2022	Resident of BARTHOLOMEN County

WITNESS Assignor's hand this 74 da	y of <u>November</u> , 2016.
	Jinghua Zhong
STATE OF <u>Indiana</u>)): SS COUNTY OF <u>Bartholome</u> w)	
Before me, a Notary Public, in and	for said County and State, personally appeared in upon his oath, acknowledged the execution of the
WITNESS my hand and Notarial S	Seal this 7th day of November, 2016.
TOBY REECE JOHNSON Notary Public - Seal State of Indiana Bartholomew County My Commission Expires Sep 10, 2022	Notary Public Printed: Toby REECE JOHNSON
My Commission Expires:	Resident of BARTHOLOMEN County
SEP. 10, 2022	

MUTATION ASSESSMENT ASSESSMENT	
WITNESS Assignor's hand this day	of <u>November</u> , 2016,
g.	Richard A. Booth
STATE OF /ND/AWA): SS	
): SS COUNTY OF <i>BARTHOLOMEN</i>	6
	for said County and State, personally appeared vorn upon his oath, acknowledged the execution of the ct and deed.
WITNESS my hand and Notarial S	eal this <u>and</u> day of <i>November</i> , 2016.
TOBY REECE JOHNSON Notary Public - Seal State of Indiana Bartholomew County	John Reece Johnson
My Commission Expires Sep 10, 2022	Printed: TOBY REECE JOHNSON
My Commission Expires:	Resident of BARTHOLONEW County
SEP. 10. 2022	

WITNESS Assignor's hand this 14	_day ofNovember, 2016. Robert J. Thomas
COUNTY OF <u>BARTHOLOMEN</u> Before me, a Notary Public, in	e and for said County and State, personally appeared Robert in upon his oath, acknowledged the execution of the ary act and deed.
WITNESS my hand and Notar TOBY REECE JOHNSON Notary Public - Seal State of Indiana Bartholomew County My Commission Expires Sep 10, 2022	rial Seal this 14 day of November, 2016. Low Reece Johnson Printed: Toby Reece Johnson
My Commission Expires: SEP. 10, 2022	Resident of BARTHOWMEW County
WITNESS Assignor's hand this COMBINED DECLARATION ASSIGNMENT CECO-1396/16-0007-SRC Page 8 of 9 17610486.1	day of, 2016.

WITNESS Assignor's hand this	_ day of	, 2016.
	Robert J. Thomas	
	Noocit 3. Thomas	•
Martin Parker Service		
STATE OF	: SS	
COUNTY OF		
Before me, a Notary Public, in I. Thomas, who, being first duly sworn foregoing "Assignment" as his volunta	upon his oath, acknowl	State, personally appeared Reedged the execution of the
WITNESS my hand and Notar	al Seal this day	of,2016.
	Notary Public	
	Printed:	
18.00 · · · · · · · · · · · · · · · · · ·	Resident of	County
My Commission Expires:		
: 3		
WITNESS Assignor's hand this	day of NOVEMBER	, 2016.
COMBINED DECLARATION ASSIGNMENT ECO-1396/16-0007-SRC lage 8-of 9 7610486.1		



STATE OF ANDIANA)	
COUNTY OF TACKSON	· ·): SS

Before me, a Notary Public, in and for said County and State, personally appeared Jisang Sun, who, being first duly sworn upon his oath, acknowledged the execution of the foregoing "Assignment" as his voluntary act and deed.

WITNESS my hand and Notarial	Scal this The day of November , 2016.
TERRY J. NEFF Notary Public- Seal State of Indiana My Commission Expires Apr 18, 2020	Notary Public Printed: TERRY J. NEFF
My Commission Expires:	Resident of JACKSON County
18-APR-2020	

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RECORDED: 11/15/2016