PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AARON S. QUINTON	04/30/2015
JOHN JERL PURCELL III	04/28/2015
NATHANIEL P. HASSALL	04/30/2015

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 2

Property Type	Number
PCT Number:	US2013071955
Application Number:	61730398

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	106389-0108
NAME OF SUBMITTER:	MARSHALL J BROWN
SIGNATURE:	/marshall j brown/
DATE SIGNED:	05/18/2015

Total Attachments: 5

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PATENT REEL: 035662 FRAME: 0123

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 U.S.A.

(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 this invention relating to

STABILIZED ENGINE CASTING CORE ASSEMBLY, METHOD FOR MAKING AN ENGINE BODY, AND ENGINE BODY FORMED THEREBY

as set forth in the following patent applications:

United States Provisional Patent Application No. 61/730,398 Filed: November 27, 2012, and PCT Application No. PCT/US2013/071955 Filed: November 26, 2013,

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 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, 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 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 International Convention or otherwise.

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Atty. Dkt. No. 106389-0108 (8-02-13566)

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 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.

Executed this 30 day of APRIL . 2015.
29/1
AARON S. QUINTON
State of ND/ANA
County of BAILTH OLDMAND
On this 30 day of Apply , 2015, before me, ANGTUA DPLITTS (a notary public in and for said county), personally appeared AARON S. QUINTON, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
WITNESS my hand and official seal ANGELA DPRITS
Signature Bethis Pairs, State of tentian Bethispeness County Commission * 601438 My Commission Leptier February 15, 2017
My Commission Expires: Frank Francisco
Executed this day of, 20
JOHN JERL PURCELL III
State of)
County of)
On this day of 20 , before me, (a notary public in and for said county), personally appeared JOHN JERL PURCELL III, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
WITNESS my hand and official seal.
Signature
My Commission Expires:

Executed this, 20	•
	AARON S. QUINTON
State of)	
County of)	
On this day of 20 before me	(a notary public in and
On thisday of 20 before me, for said county), personally appeared AARON S. QUINTON, who proved to me on name is subscribed to the within instrument and acknowledged to me that he/she e his/her signature on the instrument the person, or the entity upon behalf of which the signature of the instrument the person, or the entity upon behalf of which the signature of the instrument the person, or the entity upon behalf of which the signature of the instrument the person, or the entity upon behalf of which the signature of the signature	xecuted the same in his/her authorized capacity, and that by
WITNESS my hand and official seal.	
Signature	
My Commission Expires:	
Executed this 28 day of April, 20	<u> 115</u> .
ı	John Aud Purul
	JOHN JERL PURCELL III
State of <u>Virginia</u>) County of <u>Louisa</u>)	
On this Aday of April 2015, before me, Hofor said county), personally appeared JOHN JERL PURCELL III, who proved to rename is subscribed to the within instrument and acknowledged to me that he/she e his/her signature on the instrument the person, or the entity upon behalf of which the	xecuted the same in his/her authorized capacity, and that by
WITNESS my hand and official seal.	
Signature James Ja	
My Commission Expires: 8/31/2016	
My Commission Expires: 8/31/2016 My Commission #: 345718	
U	

Atty. Dkt. No. 106389-0108 (8-02-13566)

Executed this _	30 day of April , 201	<u>5</u> .
		Blasell NATHANIEL P. HASSALL
NAME AND SIGNATURE OF WITNESSES		
NAME:	SIGNATURE:	DATE:
NAME:	SIGNATURE:	DATE:
		Maria Montez Ward Notary Public Seal State of Indiana Bartholomew County My Commission Expires 08/14/2020

RECORDED: 05/18/2015