

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Pranati Yadav</td> <td>09/10/2013</td> </tr> <tr> <td>Phanindra Garimella</td> <td>01/24/2012</td> </tr> <tr> <td>Joan M. Wills</td> <td>02/03/2012</td> </tr> <tr> <td>Daniel R. Hashbarger</td> <td>01/25/2012</td> </tr> <tr> <td>Ross C. Berryhill</td> <td>06/19/2012</td> </tr> <tr> <td>Dean H. Dringenburg</td> <td>01/26/2012</td> </tr> </tbody> </table>		Name	Execution Date	Pranati Yadav	09/10/2013	Phanindra Garimella	01/24/2012	Joan M. Wills	02/03/2012	Daniel R. Hashbarger	01/25/2012	Ross C. Berryhill	06/19/2012	Dean H. Dringenburg	01/26/2012
Name	Execution Date														
Pranati Yadav	09/10/2013														
Phanindra Garimella	01/24/2012														
Joan M. Wills	02/03/2012														
Daniel R. Hashbarger	01/25/2012														
Ross C. Berryhill	06/19/2012														
Dean H. Dringenburg	01/26/2012														
RECEIVING PARTY DATA															
<table border="1"> <tr> <td>Name:</td> <td>Cummins Inc.</td> </tr> <tr> <td>Street Address:</td> <td>500 Jackson Street</td> </tr> <tr> <td>City:</td> <td>Columbus</td> </tr> <tr> <td>State/Country:</td> <td>INDIANA</td> </tr> <tr> <td>Postal Code:</td> <td>47202</td> </tr> </table>		Name:	Cummins Inc.	Street Address:	500 Jackson Street	City:	Columbus	State/Country:	INDIANA	Postal Code:	47202				
Name:	Cummins Inc.														
Street Address:	500 Jackson Street														
City:	Columbus														
State/Country:	INDIANA														
Postal Code:	47202														
PROPERTY NUMBERS Total: 1															
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13166538</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13166538										
Property Type	Number														
Application Number:	13166538														
CORRESPONDENCE DATA															
Fax Number: 3176361507 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 317-238-6333 Email: ipdocketing@kdlegal.com Correspondent Name: Douglas A. Collier Address Line 1: Krieg DeVault LLP Address Line 2: One Indiana Square, Sute 2800 Address Line 4: Indianapolis, INDIANA 46204															
ATTORNEY DOCKET NUMBER:	CECO-709														

NAME OF SUBMITTER:	Douglas A. Collier
Signature:	/Douglas A. Collier/
Date:	09/10/2013
Total Attachments: 8 source=CECO-709-Executed Assignment#page1.tif source=CECO-709-Executed Assignment#page2.tif source=CECO-709-Executed Assignment#page3.tif source=CECO-709-Executed Assignment#page4.tif source=CECO-709-Executed Assignment#page5.tif source=CECO-709-Executed Assignment#page6.tif source=CECO-709-Executed Assignment#page7.tif source=CECO-709-Executed Assignment#page8.tif	

ASSIGNMENT

WHEREAS, Pranati Yadav of 3489 Ravinia Circle, Aurora IL 60504, Phanindra Garimella of 3820 E Barrington Drive, Apt D, Bloomington, IN 47408, Joan M. Wills of 8934 Bellsville Pike, Nashville, IN 47448, Daniel R. Hashbarger of 420 Oakbrook Drive, Columbus, IN 47201, Ross C. Berryhill of 3300 Clay Uck Road, P.O. Box 1757, Nashville, IN 47448 and Dean H. Dringenburg of 4846 E. County Road 1025 East, Seymour, IN 47274, hereinafter referred to as Assignors, have made one or more new and useful inventions in a PARTICULATE FILTER DIAGNOSTICS for which Assignors have made or will make application for Letters Patent of the United States (hereinafter the "Application"); and

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 47202, 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 Application, and in, to and under the Application, 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 Application entitled PARTICULATE FILTER DIAGNOSTICS, 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 acknowledge that the Application was executed concurrently herewith unless a different execution date is indicated in item (a) below. Assignors hereby authorize Assignee, its counsel, or its agents to fill-in some or all of the following list of information items (a) through (c) at the discretion of the Assignee, its counsel, or its agents:

- (a) Execution Date of the Application: _____
- (b) Patent Office Number of the Application: 13/166,538
- (c) Filing Date of the Application: June 22, 2011

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 10 day of SEPTEMBER, 2013.

Pranati Yadav
Pranati Yadav

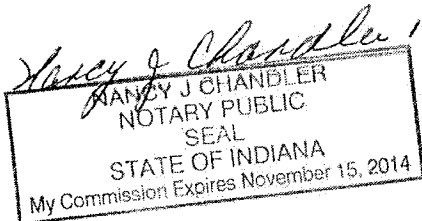
WITNESS Assignor's hand this 24th day of January, 2012.

Phanindra Garimella
Phanindra Garimella

STATE OF Indiana)
) : SS
COUNTY OF Bartholomew)

Before me, a Notary Public, in and for said County and State, personally appeared Phanindra Garimella, 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 Seal this 24th day of January, 2012.



Nancy J. Chandler
Notary Public

Printed: NANCY J. CHANDLER

Resident of Bartholomew County

My Commission Expires:

November 15, 2014

WITNESS Assignor's hand this 3rd day of February, 2012.

Joan M. Wills
Joan M. Wills

STATE OF INDIANA)
COUNTY OF BARTHOLOMEW) : SS

Before me, a Notary Public, in and for said County and State, personally appeared Joan M. Wills, 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 Seal this 3rd day of FEBRUARY 2012.

Terry J. Neff
Notary Public

Printed: TERRY J. NEFF

Resident of JACKSON County

My Commission Expires:

18-APR-2012

WITNESS Assignor's hand this 25th day of January, 2012.

Daniel R. Hashbarger
Daniel R. Hashbarger

STATE OF Indiana)
) : SS
COUNTY OF Bartholomew)

Before me, a Notary Public, in and for said County and State, personally appeared Daniel R. Hashbarger, 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 Seal this 25th day of January, 2012.

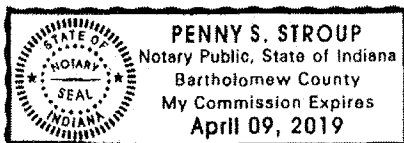
Penny S. Stroup
Notary Public

Printed: Penny S. Stroup

Resident of Bartholomew County

My Commission Expires:

April 9, 2019



WITNESS Assignor's hand this 19th day of June, 2012.

Ross C. Berryhill
Ross C. Berryhill

STATE OF INDIANA)
COUNTY OF BARTHOLOMEW) : SS

Before me, a Notary Public, in and for said County and State, personally appeared Ross C. Berryhill, 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 Seal this 19th day of JUNE, 2012.



Terry J. Neff
Notary Public

Printed: TERRY J. NEFF

Resident of JACKSON County

My Commission Expires:

18-APR-2020

WITNESS Assignor's hand this 26 day of January, 2012.

Dean H. Dringenburg
Dean H. Dringenburg

STATE OF INDIANA)
) : SS
COUNTY OF BARTHOLOMEW

Before me, a Notary Public, in and for said County and State, personally appeared Dean H. Dringenburg, 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 Seal this 26th day of January, 2012.

Tracey Fear
Notary Public

Printed: Tracey Fear

Resident of Bartolomew County

My Commission Expires:

