

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>Phanindra Garimella</td> <td>05/28/2010</td> </tr> <tr> <td>Andrew Osburn</td> <td>06/04/2010</td> </tr> <tr> <td>John N. Chi</td> <td>07/15/2010</td> </tr> <tr> <td>Joan M. Wills</td> <td>05/28/2010</td> </tr> </tbody> </table>		Name	Execution Date	Phanindra Garimella	05/28/2010	Andrew Osburn	06/04/2010	John N. Chi	07/15/2010	Joan M. Wills	05/28/2010
Name	Execution Date										
Phanindra Garimella	05/28/2010										
Andrew Osburn	06/04/2010										
John N. Chi	07/15/2010										
Joan M. Wills	05/28/2010										
RECEIVING PARTY DATA											
Name:	CUMMINS IP, INC.										
Street Address:	1400-73rd Avenue NE										
City:	Minneapolis										
State/Country:	MINNESOTA										
Postal Code:	55432										
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>12632646</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12632646						
Property Type	Number										
Application Number:	12632646										
CORRESPONDENCE DATA											
Fax Number:	(801)531-1929										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
Phone:	801-994-4646										
Email:	docket@kunzlerip.com										
Correspondent Name:	Bryan J. Massey										
Address Line 1:	8 East Broadway										
Address Line 2:	Suite 600										
Address Line 4:	Salt Lake City, UTAH 84111										
ATTORNEY DOCKET NUMBER:	8-02-12952										
NAME OF SUBMITTER:	Bryan J. Massey										
Total Attachments: 4											

OP \$40.00 12632646

501234877

**PATENT
 REEL: 024698 FRAME: 0030**

source=8_02_12952_Assignment#page1.tif
source=8_02_12952_Assignment#page2.tif
source=8_02_12952_Assignment#page3.tif
source=8_02_12952_Assignment#page4.tif

ASSIGNMENT

I, identified below as "Inventor", have made certain new and useful improvements in an invention ("Invention"), as set forth in an application for United States Letters Patent executed or about to be executed by me or otherwise in which I am an inventor and bearing the following title and Attorney Docket No. and for which the Attorney of record is hereby authorized to insert the serial number and filing date when ascribed:

Title: Apparatus, System, and Method for Estimating An NOx Conversion Efficiency of A Selective Catalytic Reduction Catalyst

Atty. Docket No. 8-02-12952

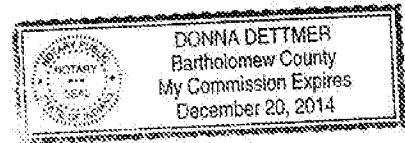
For good and valuable consideration, I do hereby sell, assign, and transfer to Cummins IP, Inc. ("Assignee"), a corporation organized under the laws of the State of Indiana, and located and doing business at 1400-73rd Avenue NE, Minneapolis, MINNESOTA 55432, and to its legal representatives, successors, and assigns, my entire right, title, and interest in and to the Invention and to all United States and foreign patent applications any of whose claims cover all or part of the Invention, to any prior or provisional application (including U.S. Provisional Patent Application No. 61/120,297, filed December 5, 2008), any application from which priority is claimed, together with all patents resulting from such applications including any continuations, divisions, reissues, re-examinations and extensions thereof and any applications claiming priority therefrom. Assignee shall hold such right, title, and interest as fully and completely as they would have been held by me had this assignment and sale not been made.

I agree, upon Assignee's request, to execute or assent to such United States and foreign patent applications and to execute all separate assignments and other legal documents that Assignee may find necessary or desirable in its exercise of the right, title, and interest assigned above. I also agree to communicate to Assignee any facts relating to the Invention or to any of the patent applications or patents contemplated above that may be useful to Assignee and to testify as to such facts in any interferences or in litigation, if requested to do so. I shall do all these things without additional compensation but at no expense to me.

I hereby request the Commissioner of Patents to issue to Assignee, as the owner of my entire right, title, and interest therein, any Letters Patent of the United States that may be issued for the Invention.

Inventor: G. V. Phanindra Date: 05/28/2010
(Signature)

Name typed or printed: Phanindra Garmiella
Address: 3820 E. Barrington Drive, Apt. D
Bloomington, IN 47408



State of Indiana)
) ss
County of Bartholomew)

On this 28th day of May, 2010, before me personally appeared said Phanindra Garmiella, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.

SEAL

Donna Dettmer
Notary Public

My Commission expires: _____

Title: Apparatus, System, and Method for Estimating A Maximum NOX Conversion Capability of A Selective Catalytic Reduction Catalyst

Atty. Docket No. 8-02-12952

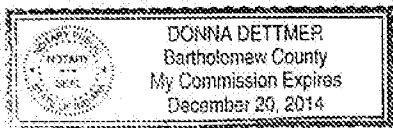
Inventor: Andrew Osburn Date: 6/4/2010
(Signature)

Name typed or printed: Andrew Osburn
Address: 8775 E. State Road 46
Nashville, IN 47448

State of Indiana)
County of Bartholomew) ss

On this 4th day of June, 2010, before me personally appeared said Andrew Osburn, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.

SEAL



Donna Dettmer
Notary Public
My Commission expires: December 20, 2014

Inventor: _____ Date: _____
(Signature)

Name typed or printed: John N. Chi
Address: 10260 Strome Avenue, #140
Raleigh, NC 27617-4372

State of _____)
County of _____) ss

On this _____ day of _____, 2010, before me personally appeared said John N. Chi, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.

SEAL

Notary Public

Title: Apparatus, System, and Method for Estimating An NOx Conversion Efficiency of A Selective Catalytic Reduction Catalyst

Atty. Docket No. 8-02-12952

Inventor: _____ Date: _____
(Signature)

Name typed or printed: Andrew Osburn
Address: 8775 E. State Road 46
Nashville, IN 47448

State of _____)
County of _____) ss

On this _____ day of _____, 2010, before me personally appeared said Andrew Osburn, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.

SEAL

Notary Public
My Commission expires: _____

Inventor: J. N. Chi Date: 15-JULY-2010
(Signature)

Name typed or printed: John N. Chi
Address: 10260 Strome Avenue, Apt. 104
Raleigh, NC. 27617

State of NC)
County of Wake) ss

On this 15th day of July, 2010, before me personally appeared said John N. Chi, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.



[Signature]

Notary Public
My Commission expires: 1-15-12

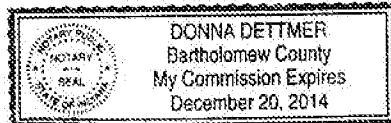
My Commission expires: _____

Title: Apparatus, System, and Method for Estimating A Maximum NOX Conversion Capability of A Selective Catalytic Reduction Catalyst

Atty. Docket No. 8-02-12952

Inventor: Joan Wills Date: 5/28/2010
(Signature)

Name typed or printed: Joan M. Wills
Address: 8934 Bellsville Pike
Nashville, IN 47448



State of Indiana)
County of Bartholomew) ss

On this 28th day of May, 2010, before me personally appeared said Joan M. Wills, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.

SEAL

Donna Dettmer
Notary Public
My Commission expires: December 20, 2014