

08-19-2003



102528750

2003 AUG 15 AM 11: 05

SHEET

FINANCE SECTION

PATENTS ONLY

TO: The Director of the United States Patent and Trademark Office: Please record the attached original document(s) or copy(ies).

Submission Type

New **8.15-03**

Resubmission (Non-Recordation)
Document ID#

Correction of PTO Error
Reel # Frame #

Corrective Document
Reel # Frame #

Conveyance Type

Assignment Security Agreement

License Change of Name

Merger Other

U.S. Government
(For Use ONLY by U.S. Government Agencies)

Departmental File Secret File

Conveying Party(ies)

Mark if additional names of conveying parties attached

Name	Execution Date		
	Month	Day	Year
Name (line 1) He, Chuan	06	25	03
Name (line 2)			
Second Party			
Name (line 1) Ralston, Parrish E.	06	25	03
Name (line 2)			

Receiving Party

Mark if additional names of receiving parties attached

Name (line 1) Cummins, Inc.

Name (line 2)

Address (line 1) 500 Jackson Street

Address (line 2)

Address (line 3) Columbus Indiana 47201

City State/Country Zip Code

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

FOR OFFICE USE ONLY

08/18/2003 6TOM11 00000140 10448378

01 FC:8021 40.00 DP

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS

Mail documents to be recorded with required cover sheet(s) information to:
Mail Stop Assignment Recordation Services, Director of the United States Patent and Trademark Office,
P.O. Box 1450, Alexandria, VA 22313-1450

PATENT
REEL: 014385 FRAME: 0691

Correspondent Name and Address

Area Code and Telephone Number

317-231-7382

Name Jeffrey A. Michael, Esquire

Address (line 1) Barnes & Thornburg

Address (line 2) 11 South Meridian Street

Address (line 3) Indianapolis, Indiana 46204

Address (line 4)

Pages Enter the total number of pages of the attached conveyance document including any attachments.

3

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

10/448378

If this document is being filed together with a new Patent Application, enter the date the patent application was

Month Day Year

Patent Cooperation Treaty (PCT)

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT PCT PCT
PCT PCT PCT

Number of Properties

Enter the total number of properties involved.

1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$ 40.00

Method of Payment: Enclosed Deposit Account

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the Deposit Account Number: #

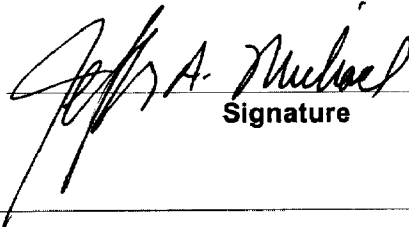
Authorization to charge additional fees: Yes No

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Jeffrey A. Michael

Name of Person Signing



Signature

August 13, 2003

Date

RECORDATION FORM COVER SHEET
CONTINUATION
PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Name (line 2)

Name (line 1)

Name (line 2)

Name (line 1)

Name (line 2)

Execution Date
Month Day Year

Execution Date
Month Day Year

Execution Date
Month Day Year

Receiving Party

Mark if additional names of receiving parties attached

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)			Patent Number(s)		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

ASSIGNMENT

WHEREAS, Chuan He, Parrish E. Ralston, and Eric L. Hagen of 1534 27th Place, Columbus, IN 47201, 936 Etna Drive, Newport News, VA 23608, and 3473 S. 200 East, Franklin, IN 46131, respectively hereinafter to as Assignor, has made a new and useful invention in CYLINDER MISFIRE DIAGNOSTIC SYSTEM for which Assignor has made or will make application for Letters Patent of the United States; 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, 47201 desires to acquire all of the entire right, title and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and in, to and under said application, and in, to an under any and all Letters Patent, United States and foreign, which may be obtained therefor and thereon;

NOW THEREFORE, to all whom it may concern, be it known that for an in consideration of the sum of One Dollar (\$1.00) and other good, valuable and sufficient considerations to Assignor in hand paid the receipt of which is hereby acknowledged, Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto Assignee, all the entire right, title and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and in, to and under said application for United States Letters Patent executed by Assignor this _____ day of _____, 20___, and any and all other application thereon and arising therefrom, including any and all divisions and continuations thereof, and any and all patents to be issued and obtained therefor and thereon, United States and foreign, including all reissues and extensions thereof.

Assignor hereby authorizes and requests the firm of Barnes & Thornburg, to insert here in parenthesis (Serial No. 10/448,378, Filed 05/29/03) the date and serial number of said application when officially known, and Assignor hereby authorizes and requests the Honorable Assistant Secretary and Commissioner of Patents and Trademarks to issue said Letters Patent to Assignee, its assigns and legal representatives.

Assignor agrees to sign 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 25 day of June, 2003.

Chuan He
Chuan He

STATE OF INDIANA)
)SS:
COUNTY OF MARION)

Before me, a Notary Public, in and for said County and State, personally appeared the above-named Assignor, to me personally known, and who executed to foregoing Assignment in my presence and acknowledged the execution thereof as his free and voluntary act and deed for the uses and purposes therein set forth and expressed.

Jeff A Michael
Notary Public

Printed: JEFFREY A. MICHAEL
My Commission Expires: JUNE 25, 2008
Resident of MARION County

WITNESS Assignor's hand this 25 day of June, 2003.

Parrish E. Ralston
Parrish E. Ralston

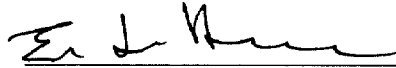
STATE OF INDIANA)
)SS:
COUNTY OF MARION)

Before me, a Notary Public, in and for said County and State, personally appeared the above-named Assignor, to me personally known, and who executed to foregoing Assignment in my presence and acknowledged the execution thereof as his free and voluntary act and deed for the uses and purposes therein set forth and expressed.

Jeff A Michael
Notary Public

Printed: JEFFREY A. MICHAEL
My Commission Expires: JUNE 25, 2008
Resident of MARION County

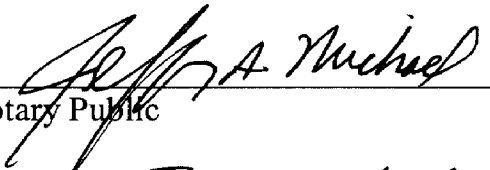
WITNESS Assignor's hand this 27 day of June, 2003.



Eric L. Hagen

STATE OF INDIANA)
)SS:
COUNTY OF MARION)

Before me, a Notary Public, in and for said County and State, personally appeared the above-named Assignor, to me personally known, and who executed to foregoing Assignment in my presence and acknowledged the execution thereof as his free and voluntary act and deed for the uses and purposes therein set forth and expressed.



Notary Public

Printed: JEFFREY A. MICHAEL
My Commission Expires: JUNE 25, 2008
Resident of MARION County