

## PATENT ASSIGNMENT

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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>Yoshikatsu IKAWA</td> <td>02/20/2012</td> </tr> <tr> <td>Masato MITSUHASHI</td> <td>02/20/2012</td> </tr> <tr> <td>Kazunari IDE</td> <td>02/20/2012</td> </tr> </tbody> </table>		Name	Execution Date	Yoshikatsu IKAWA	02/20/2012	Masato MITSUHASHI	02/20/2012	Kazunari IDE	02/20/2012
Name	Execution Date								
Yoshikatsu IKAWA	02/20/2012								
Masato MITSUHASHI	02/20/2012								
Kazunari IDE	02/20/2012								
RECEIVING PARTY DATA									
Name:	MITSUBISHI HEAVY INDUSTRIES, LTD.								
Street Address:	16-5, Konan 2-chome, Minato-ku								
City:	Tokyo								
State/Country:	JAPAN								
Postal Code:	1088215								
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>13386142</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13386142				
Property Type	Number								
Application Number:	13386142								
CORRESPONDENCE DATA									
Fax Number:	(202)721-8250								
Phone:	2027218200								
Email:	wlp@wenderoth.com								
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>									
Correspondent Name:	Wenderoth, Lind & Ponack, L.L.P.								
Address Line 1:	1030 15th Street, N.W.								
Address Line 2:	Suite 400 East								
Address Line 4:	Washington, DISTRICT OF COLUMBIA 20005								
ATTORNEY DOCKET NUMBER:	2011-2036A								
NAME OF SUBMITTER:	Karen Gass								
Total Attachments: 2 source=Assignment#page1.tif source=Assignment#page2.tif									

OP \$40.00 13386142

# ***ASSIGNMENT***

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned

**Insert Name(s)  
of Inventor(s)** Yoshikatsu IKAWA  
Masato MITSUHASHI  
Kazunari IDE  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Insert Name(s)  
of Assignee(s)** the undersigned hereby sell(s) and assign(s) to  
MITSUBISHI HEAVY INDUSTRIES, LTD.  
**Address** of 16-5, Konan 2-chome, Minato-ku, Tokyo 1088215 Japan  
\_\_\_\_\_

**Title of  
Invention** (hereinafter designated as the Assignee) the entire right, title and interest for the United States as defined in 35 USC 100, in the invention known as  
PM EMISSION AMOUNT ESTIMATION DEVICE FOR DIESEL ENGINE  
\_\_\_\_\_

**Date of  
Signing of  
Application** for which an application for patent in the United States has been executed by the undersigned  
on February 20, 2012  
\_\_\_\_\_

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, L.L.P., 1030 15<sup>th</sup> Street, N.W., Suite 400 East, Washington, D.C. 20005-1503, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordal of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date February 20, 2012 Yoshikatsu Ikawa  
 Yoshikatsu IKAWA

Date February 20, 2012 Masato Mitsuhashi  
 Masato MITSUHASHI

Date February 20, 2012 Kazunari Ide  
 Kazunari IDE

Date \_\_\_\_\_ \_\_\_\_\_

(This assignment should preferably be acknowledged before a United States Consul. If not, then the execution by the Inventor(s) should be witnessed by at least two witnesses who sign here.)

Witness Yamako Fuji

Witness Misuzu Nakayama

ACKNOWLEDGMENT

\_\_\_\_\_ }  
 \_\_\_\_\_ } ss

This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came the above-named \_\_\_\_\_ to me personally known as the individual(s) who executed the foregoing assignment, who did acknowledge to me that he (they) executed the same of his (their) own free will for the purposes therein set forth.

SEAL

\_\_\_\_\_ Official Signature

\_\_\_\_\_ Official Title

The above application may be more particularly identified as follows:

U.S. Application Serial No.: \_\_\_\_\_ Filing Date: \_\_\_\_\_

Applicant Reference Number: 10-199US Attorney Docket No.: 2011\_2036A