

## 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>Akiyoshi KATAYAMA</td> <td>05/18/2012</td> </tr> <tr> <td>Takashi MATSUMOTO</td> <td>05/21/2012</td> </tr> </tbody> </table>		Name	Execution Date	Akiyoshi KATAYAMA	05/18/2012	Takashi MATSUMOTO	05/21/2012
Name	Execution Date						
Akiyoshi KATAYAMA	05/18/2012						
Takashi MATSUMOTO	05/21/2012						
RECEIVING PARTY DATA							
Name:	MITSUBISHI ELECTRIC CORPORATION						
Street Address:	7-3, Marunouchi 2-Chome						
City:	Chiyoda-ku, Tokyo						
State/Country:	JAPAN						
Postal Code:	100-8310						
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>13467658</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13467658		
Property Type	Number						
Application Number:	13467658						
CORRESPONDENCE DATA							
Fax Number:	(202)293-7860						
Phone:	2022937060						
Email:	aaauerbach@sughrue.com, sughrue@sughrue.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:	Sughrue Mion PLLC						
Address Line 1:	2100 Pennsylvania Ave NW						
Address Line 2:	Suite 800						
Address Line 4:	Washington, DISTRICT OF COLUMBIA 20037						
ATTORNEY DOCKET NUMBER:	Q130587						
NAME OF SUBMITTER:	Alexander E. Auerbach, New App. Spec.						
Total Attachments: 1 source=ASSIGNMENT#page1.tif							

OP \$40.00 13467658

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned, Akiyoshi KATAYAMA and Takashi MATSUMOTO

hereby sells, assigns and transfers to

MITSUBISHI ELECTRIC CORPORATION  
of 7-3, Marunouchi 2-chome, Chiyoda-ku, TOKYO 100-8310 JAPAN

(hereinafter called the Assignee), its successors and assigns, the entire right, title, and interest in and to:

- (i) the application for United States Letters Patent entitled PUMPING BRAKE DETECTION AND CONTROL DEVICE AND METHOD FOR INTERNAL COMBUSTION ENGINE which was executed by the undersigned on the dates indicated below or was filed on May 9, 2012 and accorded Serial No. 13/467,658 (hereinafter called the Application);
- (ii) any and all inventions and improvements which are described in the Application;
- (iii) any and all United States Letters Patents which may be granted on the Application (hereinafter called Patent);
- (iv) any and all divisions, continuations, substitutes, reexaminations, reissues, or extensions of the Application or Patent; and
- (v) all benefits under the International Convention for the Protection of Industrial Property.

Said Assignee of said patent application and the attorneys appointed to prosecute said patent application are authorized to insert in this instrument the filing date and serial number of said application.

The Commissioner of Patents and Trademarks is authorized to issue any and all of said Letters Patent, when granted, to said Assignee.

Further, it is agreed that, when requested, without charge to but at the expense of said Assignee, the undersigned will execute all divisional, continuing, substitute, or reissue patent applications; execute all additional assignments and other writings, including reexamination papers; and provide all reasonable assistance requested by the Assignee to secure and maintain appropriate patent protection.

INVENTOR(S):

(Akiyoshi KATAYAMA) Akiyoshi Katayama  
(Takashi MATSUMOTO) Takashi Matsumoto

DATE

May 18, 2012  
May 21, 2012

PATENT