

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>Tatsuto NAGAYASU</td> <td>12/03/2012</td> </tr> <tr> <td>Takashi KAMIJO</td> <td>12/03/2012</td> </tr> <tr> <td>Masayuki INUI</td> <td>12/03/2012</td> </tr> <tr> <td>Tsuyoshi OISHI</td> <td>12/03/2012</td> </tr> <tr> <td>Hiromitsu NAGAYASU</td> <td>12/03/2012</td> </tr> <tr> <td>Hiroshi TANAKA</td> <td>12/03/2012</td> </tr> <tr> <td>Takuya HIRATA</td> <td>12/03/2012</td> </tr> <tr> <td>Tatsuya TSUJIUCHI</td> <td>12/03/2012</td> </tr> <tr> <td>Susumu OKINO</td> <td>12/03/2012</td> </tr> <tr> <td>Naoyuki KAMIYAMA</td> <td>12/03/2012</td> </tr> <tr> <td>Seiji YOSHIHARA</td> <td>12/03/2012</td> </tr> </tbody> </table> | | Name | Execution Date | Tatsuto NAGAYASU | 12/03/2012 | Takashi KAMIJO | 12/03/2012 | Masayuki INUI | 12/03/2012 | Tsuyoshi OISHI | 12/03/2012 | Hiromitsu NAGAYASU | 12/03/2012 | Hiroshi TANAKA | 12/03/2012 | Takuya HIRATA | 12/03/2012 | Tatsuya TSUJIUCHI | 12/03/2012 | Susumu OKINO | 12/03/2012 | Naoyuki KAMIYAMA | 12/03/2012 | Seiji YOSHIHARA | 12/03/2012 |
| Name | Execution Date | | | | | | | | | | | | | | | | | | | | | | | | |
| Tatsuto NAGAYASU | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| Takashi KAMIJO | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| Masayuki INUI | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| Tsuyoshi OISHI | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| Hiromitsu NAGAYASU | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| Hiroshi TANAKA | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| Takuya HIRATA | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| Tatsuya TSUJIUCHI | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| Susumu OKINO | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| Naoyuki KAMIYAMA | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seiji YOSHIHARA | 12/03/2012 | | | | | | | | | | | | | | | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>mitsubishi heavy industries, ltd.</td> </tr> <tr> <td>Street Address:</td> <td>16-5, Konan 2-chome, Minato-ku</td> </tr> <tr> <td>City:</td> <td>Tokyo</td> </tr> <tr> <td>State/Country:</td> <td>JAPAN</td> </tr> <tr> <td>Postal Code:</td> <td>108-8215</td> </tr> </table> | | Name: | mitsubishi heavy industries, ltd. | Street Address: | 16-5, Konan 2-chome, Minato-ku | City: | Tokyo | State/Country: | JAPAN | Postal Code: | 108-8215 | | | | | | | | | | | | | | |
| Name: | mitsubishi heavy industries, ltd. | | | | | | | | | | | | | | | | | | | | | | | | |
| Street Address: | 16-5, Konan 2-chome, Minato-ku | | | | | | | | | | | | | | | | | | | | | | | | |
| City: | Tokyo | | | | | | | | | | | | | | | | | | | | | | | | |
| State/Country: | JAPAN | | | | | | | | | | | | | | | | | | | | | | | | |
| Postal Code: | 108-8215 | | | | | | | | | | | | | | | | | | | | | | | | |
| 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>13701250</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13701250 | | | | | | | | | | | | | | | | | | | | |
| Property Type | Number | | | | | | | | | | | | | | | | | | | | | | | | |
| Application Number: | 13701250 | | | | | | | | | | | | | | | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fax Number: | 2028221111 | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> | | | | | | | | | | | | | | | | | | | | | | | | | |
| Email: | patentmail@whda.com | | | | | | | | | | | | | | | | | | | | | | | | |
| Correspondent Name: | Westerman, Hattori, Daniels & Adrian, LL | | | | | | | | | | | | | | | | | | | | | | | | |
| Address Line 1: | 1250 Connecticut Ave, NW | | | | | | | | | | | | | | | | | | | | | | | | |

OP \$40.00 13701250

Address Line 2: Suite 700
Address Line 4: Washington, DISTRICT OF COLUMBIA 20036

ATTORNEY DOCKET NUMBER: 121435

NAME OF SUBMITTER: Stephen G. Adrian

Total Attachments: 6
source=121435_Assignment_02-12-2013#page1.tif
source=121435_Assignment_02-12-2013#page2.tif
source=121435_Assignment_02-12-2013#page3.tif
source=121435_Assignment_02-12-2013#page4.tif
source=121435_Assignment_02-12-2013#page5.tif
source=121435_Assignment_02-12-2013#page6.tif

U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by

(Insert Name(s) & Address(es) of ASSIGNEE(S))

MITSUBISHI HEAVY INDUSTRIES, LTD.

16-5, Konan 2-chome, Minato-ku, Tokyo 108-8215 Japan

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled
(Title of Invention)

AIR POLLUTION CONTROL SYSTEM AND METHOD

relating to International Patent Application PCT/JP2011/062870 and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(a) executed on _____;

(Insert date of execution of application, if not concurrent)

(b) filed on Nov. 30, 2012

Serial No. 13/701,250;

Assignee's attorney is hereby authorized to insert in (b) the specified data when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

| | | | |
|----|--|---|--------------------------------------|
| 1) | <u>Tatsuo Nagayasu</u> <i>(Signature)</i> | <u>Tatsuo NAGAYASU</u> <i>(Type Name)</i> | <u>Dec. 3, 2012</u> <i>(Date)</i> |
| 2) | <u>Takashi Kamijo</u> <i>(Signature)</i> | <u>Takashi KAMIJO</u> <i>(Type Name)</i> | <u>Dec. 3, 2012</u> <i>(Date)</i> |
| 3) | _____ <i>(Signature)</i> | <u>Masayuki INUI</u> <i>(Type Name)</i> | _____ <i>(Date)</i> |
| 4) | <u>Tsuyoshi Oishi</u> <i>(Signature)</i> | <u>Tsuyoshi OISHI</u> <i>(Type Name)</i> | <u>Dec. 3, 2012</u> <i>(Date)</i> |
| 5) | _____ <i>(Signature)</i> | <u>Hirimitsu NAGAYASU</u> <i>(Type Name)</i> | _____ <i>(Date)</i> |

| | | | |
|-----|--------------------|--------------------|---------------|
| 6) | _____ | Hiroshi TANAKA | _____ |
| | <i>(Signature)</i> | <i>(Type Name)</i> | <i>(Date)</i> |
| 7) | _____ | Takuya HIRATA | _____ |
| | <i>(Signature)</i> | <i>(Type Name)</i> | <i>(Date)</i> |
| 8) | _____ | Tatsuya TSUJIUCHI | _____ |
| | <i>(Signature)</i> | <i>(Type Name)</i> | <i>(Date)</i> |
| 9) | _____ | Susumu OKINO | _____ |
| | <i>(Signature)</i> | <i>(Type Name)</i> | <i>(Date)</i> |
| 10) | _____ | Nacyuki KAMIYAMA | _____ |
| | <i>(Signature)</i> | <i>(Type Name)</i> | <i>(Date)</i> |
| 11) | _____ | Seiji YOSHIHARA | _____ |
| | <i>(Signature)</i> | <i>(Type Name)</i> | <i>(Date)</i> |

U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by

(Insert Name(s) & Address(es) of ASSIGNEE(S))

MITSUBISHI HEAVY INDUSTRIES, LTD.

16-5, Konan 2-chome, Minato-ku, Tokyo 108-8215 Japan

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

(Title of Invention)

AIR POLLUTION CONTROL SYSTEM AND METHOD

relating to International Patent Application PCT/JP2011/062870 and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(a) executed on _____;

(Insert date of execution of application, if not concurrent)

(b) filed on Nov. 30, 2012;

Serial No. 13/701,250;

Assignee's attorney is hereby authorized to insert in (b) the specified date, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

| | | |
|---|---|--------------------------------------|
| 1) _____ <i>(Signature)</i> | Tatsuto NAGAYASU _____ <i>(Type Name)</i> | _____ <i>(Date)</i> |
| 2) _____ <i>(Signature)</i> | Takashi KAMIJO _____ <i>(Type Name)</i> | _____ <i>(Date)</i> |
| 3) <u>Masayuki Inui</u> <i>(Signature)</i> | Masayuki INUI _____ <i>(Type Name)</i> | <u>Dec. 3, 2012</u> <i>(Date)</i> |
| 4) _____ <i>(Signature)</i> | Tsuyoshi OISHI _____ <i>(Type Name)</i> | _____ <i>(Date)</i> |
| 5) _____ <i>(Signature)</i> | Hiromitsu NAGAYASU _____ <i>(Type Name)</i> | _____ <i>(Date)</i> |

PATENT

| | | | |
|-----|--------------------------|-------------------|--------------|
| 6) | _____ | Hiroshi TANAKA | _____ |
| | (Signature) | (Type Name) | (Date) |
| 7) | _____ | Takuya HIRATA | _____ |
| | (Signature) | (Type Name) | (Date) |
| 8) | <i>Tatsuya Tsujiuchi</i> | Tatsuya TSUJIUCHI | Dec. 3, 2012 |
| | (Signature) | (Type Name) | (Date) |
| 9) | _____ | Susumu OKINO | _____ |
| | (Signature) | (Type Name) | (Date) |
| 10) | _____ | Naoyuki KAMIYAMA | _____ |
| | (Signature) | (Type Name) | (Date) |
| 11) | _____ | Seiji YOSHIHARA | _____ |
| | (Signature) | (Type Name) | (Date) |

U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by
(Insert Name(s) & Address(es) of ASSIGNEE(S))
MITSUBISHI HEAVY INDUSTRIES, LTD.

16-5, Konan 2-chome, Minato-ku, Tokyo 108-8215 Japan

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled
(Title of Invention)

AIR POLLUTION CONTROL SYSTEM AND METHOD

relating to International Patent Application PCT/JP2011/062870 said or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(a) executed on _____ *(Insert date of execution of application, if not concurrent)*

(b) filed on Nov. 30, 2012

Serial No. 13/701,250;

Assignee's attorney is hereby authorized to insert in (b) the specified data, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

| | | |
|--|---|--------------------------------------|
| 1) _____ <i>(Signature)</i> | Tatsuto NAGAYASU _____ <i>(Type Name)</i> | _____ <i>(Date)</i> |
| 2) _____ <i>(Signature)</i> | Takashi KAMIJO _____ <i>(Type Name)</i> | _____ <i>(Date)</i> |
| 3) _____ <i>(Signature)</i> | Masayuki INUI _____ <i>(Type Name)</i> | _____ <i>(Date)</i> |
| 4) _____ <i>(Signature)</i> | Tsuyoshi OISHI _____ <i>(Type Name)</i> | _____ <i>(Date)</i> |
| 5) <u>Hiromitsu Nagayasu</u> <i>(Signature)</i> | Hiromitsu NAGAYASU _____ <i>(Type Name)</i> | <u>Dec. 3, 2012</u> <i>(Date)</i> |

| | | | |
|-----|--|---|-------------------------------|
| 6) | <u>Hiroshi Tanaka</u> (Signature) | <u>Hiroshi TANAKA</u> (Type Name) | <u>Dec. 3, 2012</u> (Date) |
| 7) | <u>Takuya Horata</u> (Signature) | <u>Takuya HIRATA</u> (Type Name) | <u>Dec. 3, 2012</u> (Date) |
| 8) | <u>(Signature)</u> | <u>Tatsuya TSUJIUCHI</u> (Type Name) | <u>(Date)</u> |
| 9) | <u>Susumu</u> (Signature) | <u>Susumu OKINO</u> (Type Name) | <u>Dec. 3, 2012</u> (Date) |
| 10) | <u>Naoyuki Kamiyama</u> (Signature) | <u>Naoyuki KAMIYAMA</u> (Type Name) | <u>Dec. 3, 2012</u> (Date) |
| 11) | <u>Seiji Yoshihara</u> (Signature) | <u>Seiji YOSHIHARA</u> (Type Name) | <u>Dec. 3, 2012</u> (Date) |