

## PATENT ASSIGNMENT COVER SHEET

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>SUBMISSION TYPE:</b>                                                                                                                                                                         | NEW ASSIGNMENT                                    |
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                    | ASSIGNMENT                                        |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                     |                                                   |
| <b>Name</b>                                                                                                                                                                                     | <b>Execution Date</b>                             |
| TAKUYA YAMAZAKI                                                                                                                                                                                 | 11/22/2016                                        |
| HIROFUMI SHIMIZU                                                                                                                                                                                | 11/22/2016                                        |
| SATOSHI FUJIWARA                                                                                                                                                                                | 11/22/2016                                        |
| AKIHIRO SASOH                                                                                                                                                                                   | 11/22/2016                                        |
| SHIGERU YOKOTA                                                                                                                                                                                  | 11/22/2016                                        |
| SHOTA HARADA                                                                                                                                                                                    | 11/22/2016                                        |
| TERUAKI BABA                                                                                                                                                                                    | 11/22/2016                                        |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                     |                                                   |
| <b>Name:</b>                                                                                                                                                                                    | MITSUBISHI HEAVY INDUSTRIES, LTD.                 |
| <b>Street Address:</b>                                                                                                                                                                          | 16-5 KONAN 2-CHOME                                |
| <b>City:</b>                                                                                                                                                                                    | MINATO-KU, TOKYO                                  |
| <b>State/Country:</b>                                                                                                                                                                           | JAPAN                                             |
| <b>Postal Code:</b>                                                                                                                                                                             | 1088215                                           |
| <b>Name:</b>                                                                                                                                                                                    | NATIONAL UNIVERSITY CORPORATION NAGOYA UNIVERSITY |
| <b>Street Address:</b>                                                                                                                                                                          | 1, FURO-CHO                                       |
| <b>City:</b>                                                                                                                                                                                    | CHIKUSA-KU, NAGOYA-SHI, AICHI                     |
| <b>State/Country:</b>                                                                                                                                                                           | JAPAN                                             |
| <b>Postal Code:</b>                                                                                                                                                                             | 4648601                                           |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                |                                                   |
| <b>Property Type</b>                                                                                                                                                                            | <b>Number</b>                                     |
| <b>Application Number:</b>                                                                                                                                                                      | 15313746                                          |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                      |                                                   |
| <b>Fax Number:</b>                                                                                                                                                                              | (202)721-8200                                     |
| <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i> |                                                   |
| <b>Phone:</b>                                                                                                                                                                                   | 2027218200                                        |
| <b>Email:</b>                                                                                                                                                                                   | wlp@wenderoth.com                                 |
| <b>Correspondent Name:</b>                                                                                                                                                                      | WENDEROTH, LIND & PONACK, L.L.P.                  |
| <b>Address Line 1:</b>                                                                                                                                                                          | 1030 15TH STREET, NW                              |
| <b>Address Line 2:</b>                                                                                                                                                                          | SUITE 400 EAST                                    |

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|-------------------------------------------------------------------------------------------|--------------|
| <b>Address Line 4:</b> WASHINGTON, D.C. 20005                                             |              |
| <b>ATTORNEY DOCKET NUMBER:</b>                                                            | 2016-1627A   |
| <b>NAME OF SUBMITTER:</b>                                                                 | KAREN GASS   |
| <b>SIGNATURE:</b>                                                                         | /KAREN GASS/ |
| <b>DATE SIGNED:</b>                                                                       | 02/17/2017   |
| <b>Total Attachments: 2</b><br>source=Assignment#page1.tif<br>source=Assignment#page2.tif |              |

| <b>COMBINED DECLARATION AND ASSIGNMENT<br/>FOR UTILITY OR DESIGN APPLICATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Title of<br/>Invention</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>MPD THRUSTER THAT ACCELERATES ELECTRODELESS PLASMA<br/>AND ELECTRODELESS PLASMA ACCELERATING METHOD<br/>USING MPD THRUSTER</b> |
| <b>DECLARATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                   |
| <p>As a below named inventor, I hereby declare that:</p> <p>This declaration<br/>is directed to:</p> <p style="margin-left: 40px;"><input type="checkbox"/> The attached application, or</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> United States application or PCT international application<br/>number <u>PCT/JP2014/072147</u> filed on <u>August 25, 2014</u>.</p> <p>The above-identified application was made or authorized to be made by me.</p> <p>I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.</p> <p>I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001<br/>by fine or imprisonment of not more than five (5) years, or both.</p> <p>Note to Inventor: 37 C.F.R. § 1.63(c) states: "A person may not execute an oath or declaration for an application<br/>unless that person has reviewed and understands the contents of the application, including the claims, and is aware<br/>of the duty to disclose to the Office all information known to the person to be material to patentability as defined in<br/>§ 1.56."</p>                                                                                                                                         |                                                                                                                                   |
| <b>ASSIGNMENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                   |
| <p>In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid, I hereby sell and<br/>assign to</p> <p><u>(1) MITSUBISHI HEAVY INDUSTRIES, LTD. (2) National University Corporation Nagoya University</u><br/>(Name of Assignee)</p> <p>of <u>(1) 16-5, Konan 2-chome, Minato-ku, Tokyo, 1088215 Japan (2) 1, Furo-cho, Chikusa-ku, Nagoya-shi,</u><br/><u>Aichi 4648601 Japan</u><br/>(Address of Assignee)</p> <p>(hereinafter designated as the Assignee) my entire right, title and interest for the United States as defined in 35 USC<br/>100, for any invention set forth in the above-identified application.</p> <p>I agree to execute all papers necessary in connection with this application for patent in the USPTO for the invention,<br/>and any continuation, divisional or reissue applications thereof and also to execute separate assignments in connection<br/>with such applications as the Assignee may deem necessary or expedient.</p> <p>I agree to execute all papers necessary in connection with any post-grant proceeding which may occur in connection<br/>with this application or continuation, divisional or reissue thereof and to cooperate with the Assignee in every way<br/>possible in obtaining evidence and going forward with such post-grant proceeding.</p> |                                                                                                                                   |

I agree 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.

I agree to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

I hereby authorize and request the USPTO to issue any and all Letters Patents of the United States resulting from the application or any continuation, divisional or reissue applications thereof to the Assignee, as Assignee of my entire interest, and covenant that I have not executed, and will not execute, any agreement in conflict herewith.

First Inventor (Legal Name): Takuya YAMAZAKI

Signature: Takuya Yamazaki

Date: 22 NOV 2016

Second Inventor (Legal Name): Hirofumi SHIMIZU

Signature: Hirofumi Shimizu

Date: 22 NOV 2016

Third Inventor (Legal Name): Satoshi FUJIWARA

Signature: Satoshi Fujiwara

Date: 22 NOV 2016

Fourth Inventor (Legal Name): Akihiro SASOH

Signature: Akihiro Sasoh

Date: 22 NOV 2016

Fifth Inventor (Legal Name): Shigeru YOKOTA

Signature: Shigeru Yokota

Date: 22 NOV 2016

Sixth Inventor (Legal Name): Shota HARADA

Signature: Shota Harada

Date: 22 NOV 2016

Seventh Inventor (Legal Name): Teruaki BABA

Signature: Teruaki Baba

Date: 22 NOV 2016