

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

|                       |                |
|-----------------------|----------------|
| SUBMISSION TYPE:      | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT     |

**CONVEYING PARTY DATA**

| Name            | Execution Date |
|-----------------|----------------|
| Tomomi Maruyama | 08/17/2010     |
| Eiji Saiki      | 08/17/2010     |
| Akitoshi Kato   | 08/17/2010     |
| Yoshihiro Honda | 08/17/2010     |

**RECEIVING PARTY DATA**

|                   |                            |
|-------------------|----------------------------|
| Name:             | Iwasaki Electric Co., Ltd. |
| Street Address:   | 12-4, Shiba 3-chome        |
| Internal Address: | Minato-ku                  |
| City:             | Tokyo                      |
| State/Country:    | JAPAN                      |
| Postal Code:      | 105-0014                   |

|                   |                                 |
|-------------------|---------------------------------|
| Name:             | Tokyo Rectifier Co., Ltd.       |
| Street Address:   | 30-10 Syukugawara 5-chome       |
| Internal Address: | Tama-ku, Kawasaki-shi, Kanagawa |
| City:             | Kawasaki-shi                    |
| State/Country:    | JAPAN                           |
| Postal Code:      | 214-0021                        |

|                   |   |
|-------------------|---|
| Name:             | JPS Co., Ltd.                                   |
| Street Address:   | NEOPOLICE 309                                   |
| Internal Address: | 1189-21 Oaza Shimotomi, Tokorozawa-shi, Saitama |
| City:             | Tokorozawa-shi                                  |
| State/Country:    | JAPAN   |
| Postal Code:      | 359-0001  |

**PROPERTY NUMBERS Total: 1**

| Property Type | Number |
|---------------|--------|
|---------------|--------|

**501269767**

**PATENT**  
**REEL: 024873 FRAME: 0645**

**OP \$40.00 12918974**

|                     |          |
|---------------------|----------|
| Application Number: | 12918974 |
|---------------------|----------|

**CORRESPONDENCE DATA**

Fax Number: (914)288-0023  
*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*  
Phone: 914-288-0022  
Email: uspto@leasonellis.com  
Correspondent Name: Leason Ellis LLP  
Address Line 1: 81 Main Street  
Address Line 2: Suite 503  
Address Line 4: White Plains, NEW YORK 10601

|                         |               |
|-------------------------|---------------|
| ATTORNEY DOCKET NUMBER: | 3507/1257-US0 |
|-------------------------|---------------|

|                    |                  |
|--------------------|------------------|
| NAME OF SUBMITTER: | Melvin C. Garner |
|--------------------|------------------|

**Total Attachments: 9**  
source=Assignment for filing (00073159)#page1.tif  
source=Assignment for filing (00073159)#page2.tif  
source=Assignment for filing (00073159)#page3.tif  
source=Assignment for filing (00073159)#page4.tif  
source=Assignment for filing (00073159)#page5.tif  
source=Assignment for filing (00073159)#page6.tif  
source=Assignment for filing (00073159)#page7.tif  
source=Assignment for filing (00073159)#page8.tif  
source=Assignment for filing (00073159)#page9.tif

Attorney Docket No.:

ASSIGNMENT

I, Tomomi MARUYAMA, a citizen of Japan, having a residence of c/o Kawasato Plant, IWASAKI ELECTRIC CO., LTD., 362-26, Akagidai, Konosu-shi, Saitama 365-0001 Japan;

I, Eiji SAIKI, a citizen of Japan, having a residence of c/o Kawasato Plant, IWASAKI ELECTRIC CO., LTD., 362-26, Akagidai, Konosu-shi, Saitama 365-0001 Japan;

I, Akitoshi KATO, a citizen of Japan, having a residence of c/o TOKYO RECTIFIER CO., LTD., 30-10, Syukugawara 5-chome, Tama-ku, Kawasaki-shi, Kanagawa 214-0021 Japan;

I, Yoshihiro HONDA, a citizen of Japan, having a residence of c/o JPS CO., LTD., NEOPOLICE 309, 1189-21, Oaza Shimotomi, Tokorozawa-shi, Saitama 359-0001 Japan;

(hereinafter "ASSIGNOR") in consideration of the sum of Ten Dollars (\$10.00), or the equivalent thereof, and other good and valuable consideration, the sufficiency of which and receipt of which are hereby acknowledged, paid to ASSIGNOR by

IWASAKI ELECTRIC CO., LTD.

TOKYO RECTIFIER CO., LTD.

JPS CO., LTD.

a Corporation having a place of business at 12-4, Shiba 3-chome, Minato-ku, Tokyo 105-0014 Japan; 30-10, Syukugawara 5-chome, Tama-ku, Kawasaki-shi, Kanagawa 214-0021 Japan; and NEOPOLICE 309, 1189-21, Oaza Shimotomi, Tokorozawa-shi, Saitama 359-0001 Japan respectively (hereinafter "ASSIGNEE"), do hereby sell and assign to said ASSIGNEE, its successors and assigns, the below indicated right, title, and interest, **throughout the world** in and to my Invention entitled:

CHARGING APPARATUS AND CHARGING METHOD

invented by me and described in Patent Application identified by the docket no. and title above, in the United States of America; and all patents, divisions, reissues, continuations and any extensions thereof and rights of priority therein, said interest being my entire ownership interest in the same, to be held and enjoyed by said ASSIGNEE, its successors, assigns, or other legal representatives, to the full end of the term thereof, as fully and entirely as the same would have

**PATENT**

**REEL: 024873 FRAME: 0647**

**Attorney Docket No.:**

been held and enjoyed by me if this assignment and sale had not been made, including all rights of Assignor to recover for past infringement thereof;

And for the consideration aforesaid, I hereby covenant and agree to and with said ASSIGNEE, its successors and assigns, that whenever ASSIGNEE, its counsel or representative, or the counsel or representative of its successors or assigns, shall advise that an amendment to, or a division of, or any other proceeding or action in connection with an application concerning said Invention, including interference proceedings, is lawful and desirable, or that a reissue or continuation or extension of such application or patent issuing therefrom is lawful and desirable, I will sign all papers and drawings, take all rightful oaths and affidavits, and do all acts necessary or required to be done for the procurement of all lawful rights associated with the Invention, or for the reissue or continuation or extension of the same, will do all acts necessary or required to secure in said ASSIGNEE, its successors or assigns, the title to and full benefit of all rights hereby assigned, without charge to said ASSIGNEE or its successors or assigns, but at its or their expense; and I hereby appoint every present or future officer of said ASSIGNEE as my agent to sign all such papers and to do all such necessary acts on my behalf, to the fullest extent permitted by law;

And I hereby authorize and request the Commission of Patents and Trademarks and any other granting authority to issue any Letters Patent resulting from said Invention and application(s) concerning same to said ASSIGNEE.

This assignment shall have an effective date corresponding to the last date of execution.

I declare under penalty of perjury under the laws of the United States of America, and under penalty of the laws of any other jurisdiction before which this document may be presented, that I have signed this document as my own free act and that all of the foregoing is true and correct.

Dated: August 17, 2010

丸山 知己  
Tomomi MARUYAMA, Inventor

**PATENT**

**REEL: 024873 FRAME: 0648**

Attorney Docket No.:

Dated: August 17, 2010

齊木英司

Eiji SAIKI, Inventor

Dated: \_\_\_\_\_

Akitoshi KATO, Inventor

Dated: \_\_\_\_\_

Yoshihiro HONDA, Inventor

PATENT

REEL: 024873 FRAME: 0649

(2507)1256 JIS000002250 112

**Attorney Docket No.:**

**ASSIGNMENT**

I, Tomomi MARUYAMA, a citizen of Japan, having a residence of c/o Kawasato Plant, IWASAKI ELECTRIC CO., LTD., 362-26, Akagidai, Konosu-shi, Saitama 365-0001 Japan;

I, Eiji SAIKI, a citizen of Japan, having a residence of c/o Kawasato Plant, IWASAKI ELECTRIC CO., LTD., 362-26, Akagidai, Konosu-shi, Saitama 365-0001 Japan;

I, Akitoshi KATO, a citizen of Japan, having a residence of c/o TOKYO RECTIFIER CO., LTD., 30-10, Syukugawara 5-chome, Tama-ku, Kawasaki-shi, Kanagawa 214-0021 Japan;

I, Yoshihiro HONDA, a citizen of Japan, having a residence of c/o JPS CO., LTD., NEOPOLICE 309, 1189-21, Oaza Shimotomi, Tokorozawa-shi, Saitama 359-0001 Japan;

(hereinafter "ASSIGNOR") in consideration of the sum of Ten Dollars (\$10.00), or the equivalent thereof, and other good and valuable consideration, the sufficiency of which and receipt of which are hereby acknowledged, paid to ASSIGNOR by

IWASAKI ELECTRIC CO., LTD.

TOKYO RECTIFIER CO., LTD.

JPS CO., LTD.

a Corporation having a place of business at 12-4, Shiba 3-chome, Minato-ku, Tokyo 105-0014 Japan; 30-10, Syukugawara 5-chome, Tama-ku, Kawasaki-shi, Kanagawa 214-0021 Japan; and NEOPOLICE 309, 1189-21, Oaza Shimotomi, Tokorozawa-shi, Saitama 359-0001 Japan respectively (hereinafter "ASSIGNEE"), do hereby sell and assign to said ASSIGNEE, its successors and assigns, the below indicated right, title, and interest, **throughout the world** in and to my Invention entitled:

CHARGING APPARATUS AND CHARGING METHOD

invented by me and described in Patent Application identified by the docket no. and title above, in the United States of America; and all patents, divisions, reissues, continuations and any extensions thereof and rights of priority therein, said interest being my entire ownership interest in the same, to be held and enjoyed by said ASSIGNEE, its successors, assigns, or other legal representatives, to the full end of the term thereof, as fully and entirely as the same would have

**PATENT**

**REEL: 024873 FRAME: 0650**

**Attorney Docket No.:**

been held and enjoyed by me if this assignment and sale had not been made, including all rights of Assignor to recover for past infringement thereof;

And for the consideration aforesaid, I hereby covenant and agree to and with said ASSIGNEE, its successors and assigns, that whenever ASSIGNEE, its counsel or representative, or the counsel or representative of its successors or assigns, shall advise that an amendment to, or a division of, or any other proceeding or action in connection with an application concerning said Invention, including interference proceedings, is lawful and desirable, or that a reissue or continuation or extension of such application or patent issuing therefrom is lawful and desirable, I will sign all papers and drawings, take all rightful oaths and affidavits, and do all acts necessary or required to be done for the procurement of all lawful rights associated with the Invention, or for the reissue or continuation or extension of the same, will do all acts necessary or required to secure in said ASSIGNEE, its successors or assigns, the title to and full benefit of all rights hereby assigned, without charge to said ASSIGNEE or its successors or assigns, but at its or their expense; and I hereby appoint every present or future officer of said ASSIGNEE as my agent to sign all such papers and to do all such necessary acts on my behalf, to the fullest extent permitted by law;

And I hereby authorize and request the Commission of Patents and Trademarks and any other granting authority to issue any Letters Patent resulting from said Invention and application(s) concerning same to said ASSIGNEE.

This assignment shall have an effective date corresponding to the last date of execution.

I declare under penalty of perjury under the laws of the United States of America, and under penalty of the laws of any other jurisdiction before which this document may be presented, that I have signed this document as my own free act and that all of the foregoing is true and correct.

Dated: \_\_\_\_\_

\_\_\_\_\_  
Tomomi MARUYAMA, Inventor





Attorney Docket No.:

**ASSIGNMENT**

I, Tomomi MARUYAMA, a citizen of Japan, having a residence of c/o Kawasato Plant, IWASAKI ELECTRIC CO., LTD., 362-26, Akagidai, Konosu-shi, Saitama 365-0001 Japan;

I, Eiji SAIKI, a citizen of Japan, having a residence of c/o Kawasato Plant, IWASAKI ELECTRIC CO., LTD., 362-26, Akagidai, Konosu-shi, Saitama 365-0001 Japan;

I, Akitoshi KATO, a citizen of Japan, having a residence of c/o TOKYO RECTIFIER CO., LTD., 30-10, Syukugawara 5-chome, Tama-ku, Kawasaki-shi, Kanagawa 214-0021 Japan;

I, Yoshihiro HONDA, a citizen of Japan, having a residence of c/o JPS CO., LTD., NEOPOLICE 309, 1189-21, Oaza Shimotomi, Tokorozawa-shi, Saitama 359-0001 Japan;

(hereinafter "ASSIGNOR") in consideration of the sum of Ten Dollars (\$10.00), or the equivalent thereof, and other good and valuable consideration, the sufficiency of which and receipt of which are hereby acknowledged, paid to ASSIGNOR by

IWASAKI ELECTRIC CO., LTD.

TOKYO RECTIFIER CO., LTD.

JPS CO., LTD.

a Corporation having a place of business at 12-4, Shiba 3-chome, Minato-ku, Tokyo 105-0014 Japan; 30-10, Syukugawara 5-chome, Tama-ku, Kawasaki-shi, Kanagawa 214-0021 Japan; and NEOPOLICE 309, 1189-21, Oaza Shimotomi, Tokorozawa-shi, Saitama 359-0001 Japan respectively (hereinafter "ASSIGNEE"), do hereby sell and assign to said ASSIGNEE, its successors and assigns, the below indicated right, title, and interest, **throughout the world** in and to my Invention entitled:

CHARGING APPARATUS AND CHARGING METHOD

invented by me and described in Patent Application identified by the docket no. and title above, in the United States of America; and all patents, divisions, reissues, continuations and any extensions thereof and rights of priority therein, said interest being my entire ownership interest in the same, to be held and enjoyed by said ASSIGNEE, its successors, assigns, or other legal representatives, to the full end of the term thereof, as fully and entirely as the same would have

**PATENT**

**REEL: 024873 FRAME: 0653**

**Attorney Docket No.:**

been held and enjoyed by me if this assignment and sale had not been made, including all rights of Assignor to recover for past infringement thereof;

And for the consideration aforesaid, I hereby covenant and agree to and with said ASSIGNEE, its successors and assigns, that whenever ASSIGNEE, its counsel or representative, or the counsel or representative of its successors or assigns, shall advise that an amendment to, or a division of, or any other proceeding or action in connection with an application concerning said Invention, including interference proceedings, is lawful and desirable, or that a reissue or continuation or extension of such application or patent issuing therefrom is lawful and desirable, I will sign all papers and drawings, take all rightful oaths and affidavits, and do all acts necessary or required to be done for the procurement of all lawful rights associated with the Invention, or for the reissue or continuation or extension of the same, will do all acts necessary or required to secure in said ASSIGNEE, its successors or assigns, the title to and full benefit of all rights hereby assigned, without charge to said ASSIGNEE or its successors or assigns, but at its or their expense; and I hereby appoint every present or future officer of said ASSIGNEE as my agent to sign all such papers and to do all such necessary acts on my behalf, to the fullest extent permitted by law;

And I hereby authorize and request the Commission of Patents and Trademarks and any other granting authority to issue any Letters Patent resulting from said Invention and application(s) concerning same to said ASSIGNEE.

This assignment shall have an effective date corresponding to the last date of execution.

I declare under penalty of perjury under the laws of the United States of America, and under penalty of the laws of any other jurisdiction before which this document may be presented, that I have signed this document as my own free act and that all of the foregoing is true and correct.

Dated: \_\_\_\_\_

\_\_\_\_\_  
Tomomi MARUYAMA, Inventor

Attorney Docket No.:

Dated: \_\_\_\_\_

\_\_\_\_\_  
Eiji SAIKI, Inventor

Dated: \_\_\_\_\_

\_\_\_\_\_  
Akitoshi KATO, Inventor

Dated: August 17, 2010

本多義博  
Yoshihiro HONDA, Inventor