PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2988876

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

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| YOICHIRO HASHIMOTO | 06/23/2014 |
| EIKO NAKAZAWA | 06/23/2014 |
| MAMI KONOMI | 06/25/2014 |
| SHUICHI TAKEUCHI | 06/23/2014 |

RECEIVING PARTY DATA

| Name: | Hitachi High-Technologies Corporation | |
|-----------------|--|--|
| Street Address: | 24-14, Nishishimbashi 1-chome, Minato-ku | |
| City: | Tokyo | |
| State/Country: | JAPAN | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14376860 |

CORRESPONDENCE DATA

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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.

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ATTORNEY DOCKET NUMBER: XA-12663 NAME OF SUBMITTER: TYNISHA PURIFOY **SIGNATURE:** /Tynisha Purifoy/ **DATE SIGNED:** 08/20/2014

Total Attachments: 1

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PATENT REEL: 033570 FRAME: 0890 502942278

ASSIGNMENT

(譲渡証)

As a below named inventor, I hereby declare that:

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me by Hitachi High-Technologies Corporation,

a corporation organized under the laws of Japan,

located at 24-14, Nishi Shimbashi 1-chome, Minato-ku, Tokyo, Japan,

receipt of which is hereby acknowledged I do hereby sell and assign to said. Hitachi High-Technologies Corporation, its successors and assigns, all my right, title and interest, in and for the United States of America, in and to

CHARGED PARTICLE DEVICE AND WIRING METHOD

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed on even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted,

to be held and enjoyed by said Hitachi High-Technologies Corporation,

its successors, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said Hitachi High-Technologies Corporation,

Signed on the date(s) indicated aside our signatures:

| INVENTOR(S) (発明者フルネームサイン) | | | Date Signed (署名日) | |
|------------------------------|--|--|--|--|
| 1)_ | yorchiro Hashimoto | Yoichiro HASHIMOTO | 6/23/2014 | |
| | Eiko Nakazawa | Eiko NAKAZAWA | 6/23/2014 | |
| | mami Conomi | Mami KONOMI | 6/25/2014 | |
| _ | Shuichi Takenchi | Shuichi TAKEUCHI | 6/23/2014 | |
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PATENT REEL: 033570 FRAME: 0891

RECORDED: 08/20/2014