502139447 11/26/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date | |
|--------------|----------------|--|
| Kenji Kameda | 09/14/2012 | |
| Yuji Urano | 09/14/2012 | |

RECEIVING PARTY DATA

| Name: | Hitachi Kokusai Electric Inc. | |
|-----------------|-------------------------------|--|
| Street Address: | 14-1, Sotokanda 4-chome | |
| City: | Chiyoda-ku, Tokyo | |
| State/Country: | JAPAN | |
| Postal Code: | 1018980 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13616872 |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | HITACHI13-21110132US01 |
|-------------------------|------------------------|
| NAME OF SUBMITTER: | Daniel N. Calder |

Total Attachments: 3

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PATENT

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ASSIGNMENT

KAMEDA, Kenji, residing at 1. Yasuuchi 2-chome. Yatsuo-machi. Toyama-shi. TOYAMA 9392393. Japan, a citizen of Japan; and URANO, Yuji, residing at 1. Yasuuchi 2-chome. Yatsuo-machi. Toyama-shi. TOYAMA 9392393. Japan, a citizen of Japan (hereafter jointly and severally referred to as the undersigned), are the inventors of

CLEANING METHOD, METHOD OF MANUFACTURING SEMICONDUCTOR DEVICE, SUBSTRATE PROCESSING APPARATUS AND RECORDING MEDIUM

for which the undersigned have executed an application for United States Letters Patent, U.S. Patent Application No. 13/616,872, filed _____ September 14___, 2012.

The undersigned hereby authorize assignee or assignee's representative to insert the Application Number and the filing date of this application if they are unknown at the time of execution of this assignment.

HITACHI KOKUSAI ELECTRIC INC., a corporation, having a principal place of business at 14-1, Sotokanda 4-chome, Chiyoda-ku, TOKYO 1018980, Japan (hereafter referred to as the assignee), is desirous of acquiring the entire right, title and interest in said invention, all applications for and all letters patent issued on said invention.

For good and valuable consideration, the receipt and sufficiency of which is acknowledged, the undersigned, intending to be legally bound, do hereby sell, assign and transfer to the assignee and assignee's successors, assigns and legal representatives the entire right, title and interest in said invention and all patent applications thereon, including, but not limited to, the application for United States Letters Patent entitled as above, and all divisions and continuations thereof, and in all letters patent, including all reissues and reexaminations thereof, throughout the world, including the right to claim priority under the Paris Convention or other treaty.

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It is agreed that the undersigned shall be legally bound, upon request of the assignee, to supply all information and evidence relating to the making and practice of said invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention throughout the world for the benefit of the assignee, and to execute all instruments proper to carry out the intent of this instrument.

The undersigned warrant that the rights and property herein conveyed are free and clear of any encumbrance.

EXECUTED under seal on this 14th day of September, 2012 at Toyama-shi, Japan.

Witness:

Ryuji Yamamoto

KAMEDA, Kenji

(L.S.)

(Although not mandatory, if possible, please subscribe appropriate notarization and obtain APOSTILLE)

| EXECUTED under seal on this $m{k}$ | 1th day of September, 2012 | |
|------------------------------------|----------------------------|--------|
| at <u>Toyama-shi. Japan</u> . | | |
| Witness: | | |
| Ryuji Yamamoto | Wano, Yuji URANO, Yuji | (L.S.) |

(Although not mandatory, if possible, please subscribe appropriate notarization and obtain APOSTILLE)

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RECORDED: 11/26/2012