

02-25-2008

11/990519  
IAP05Rec'd PCT 15 FEB 2008

U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office



103483992

To the Director of the U.S. Patent and Trademark Office

documents or the new address(es) below.

1. Name of conveying party(ies):

Toshimitsu Miyata (01/09/2008), Akira Hayashida  
(01/09/2008), Masakazu Shimada (01/09/2008),

Additional name(s) of conveying party(ies) attached? ☒ Yes ☐ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s): in parentheses after inventor name

☒ Assignment ☐ Merger ☐ Change of Name

☐ Security Agreement ☐ Joint Research Agreement

☐ Government Interest Assignment

☐ Executive Order 9424, Confirmatory License

☐ Other

2. Name and address of receiving party(ies)

Name: HITACHI KOKUSAI ELECTRIC INC.

Internal Address:

Street Address:

14-1, Sotokanda 4-chome, Chiyoda-ku

City: Tokyo

State:

Country: JAPAN Zip: 101-8980

Additional name(s) & address(es) attached? ☒ Yes ☐ No

4. Application or patent number(s):

☒ This document is being filed together with a new application.

A. Patent Application No.(s)

This application

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: RADER, FISHMAN & GRAUER PLLC

Internal Address: Atty. Dkt.: KKI-0113

Street Address: 1233 20th Street, N.W.  
Suite 501

City: Washington

State: DC Zip: 20036

Phone Number: (202) 955-3750

Fax Number: (202) 955-3751

Email Address:

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

☐ Authorized to be charged by credit card

☒ Authorized to be charged to deposit account

☐ Enclosed

☐ None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers  
Expiration Date

b. Deposit Account Number 18-0013  
Authorized User Name Toshikatsu Imaizumi

9. Signature:

Toshikatsu Imaizumi - 61,648

Name of Person Signing

February 15, 2008

Date

Total number of pages including cover sheet, attachments, and documents:

5

11/990519

IAP05Rec'd PCT 15 FEB 2008

**RECORDATION FORM COVER SHEET (PTO-1595)**  
(supplemental sheet)

**Additional Conveying Party(ies)/Execution Date(s) (1. Continued):**

Kimio Kitamura (02/07/2008), and Kenji Tanaka (02/07/2008)

**Additional Assignees (2. Continued):**

Assignee Name: Teitokusha Co., Ltd.

Internal Address:

Street Address: 1-5-32, Shigita, Joto-ku, Osaka-shi

City: Osaka State: \_\_\_\_\_ Country: JAPAN Zip: 536-0015

Assignee Name: \_\_\_\_\_

Internal Address:

Street Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_ Zip: \_\_\_\_\_

Assignee Name: \_\_\_\_\_

Internal Address:

Street Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_ Zip: \_\_\_\_\_

**Additional Applications and/or Patents (4. Continued):**

Additional Patent Application Numbers

4A. Continued:

Additional Patent Numbers

4B. Continued:

Additional numbers attached?

☐ Yes

☒ No

11/990519

1AP05Rec'd PCT 15 FEB 2008

Docket Number: KKI-0113

### ASSIGNMENT

WHEREAS, I, as a below named inventor, residing at the address stated next to my name, am a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in

#### **SUBSTRATE PROCESSING APPARATUS, HEATING APPARATUS FOR USE IN THE SAME, METHOD OF MANUFACTURING SEMICONDUCTORS WITH THOSE APPARATUSES, AND HEATING ELEMENT SUPPORTING STRUCTURE**

for which application for Letters Patent of the United States of America was executed by me on the date indicated next to my name and address;

AND WHEREAS, HITACHI KOKUSAI ELECTRIC INC., a Japanese corporation with offices at 14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 101-8980 JAPAN, and Teitokusha Co., Ltd., a Japanese corporation with offices at 1-5-32, Shigita, Joto-ku, Osaka-shi, Osaka 536-0015 JAPAN hereinafter referenced as ASSIGNEES) are desirous of acquiring a 50% share each of all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries;

NOW THEREFORE, in consideration of the sum of Ten Dollar (\$10.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEES, its successors, assigns, and legal representatives, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue the said United States Letters Patent to said ASSIGNEES, as the assignee of the whole right, title and interest thereto;

And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEES or its designee, as ASSIGNEES or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to

PATENT

REEL: 020568 FRAME: 0054

perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEE thereof shall hereafter require and prepare at its own expense;

And I further agree that ASSIGNEES will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;

And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

And I hereby authorize and request my attorney(s) of record in this application to insert the serial number and filing date of this application in the spaces that follow:

Serial Number: , Filing Date: .

This assignment executed on the dates indicated below.

Toshimitsu MIYATA Miyata Toshimitsu January 9, 2008  
Signature Date

Akira HAYASHIDA Hayashida Akira January 9, 2008  
Signature Date

Masakazu SHIMADA M. Shimada January 9, 2008  
Signature Date

Kimio KITAMURA \_\_\_\_\_  
Signature Date

Kenji TANAKA \_\_\_\_\_  
Signature Date

perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEE thereof shall hereafter require and prepare at its own expense;

And I further agree that ASSIGNEES will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;

And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

And I hereby authorize and request my attorney(s) of record in this application to insert the serial number and filing date of this application in the spaces that follow:

Serial Number: , Filing Date:

This assignment executed on the dates indicated below.

Toshimitsu MIYATA

Signature

Date

Akira HAYASHIDA

Signature

Date

Masakazu SHIMADA

Signature

Date

Kimio KITAMURA

*Handwritten signature of Kimio Kitamura*

08. 7. Feb.

Signature

Date

Kenji TANAKA

*Handwritten signature of Kenji Tanaka*

07/02/08

Signature

Date