PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------|----------------|
| HIROSHI TSUJI | 02/04/2009 |
| NAOMA BAN | 02/05/2009 |

RECEIVING PARTY DATA

| Name: | HITACHI HIGH-TECHNOLOGIES CORPORATION |
|-----------------|---------------------------------------|
| Street Address: | 1-24-14, Nishi Shinbashi, Minato-ku |
| City: | Tokyo |
| State/Country: | JAPAN |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 12372374 |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | 075905-0089 |
|-------------------------|-------------|
| | 1L |

NAME OF SUBMITTER: Keith E. George 34,111

Total Attachments: 2

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PATENT REEL: 022268 FRAME: 0234

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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 citizen of Japan by Hitachi High-Technologies Corporation, a corporation organized under the laws of Japan,

located at 1-24-14, Nishi Shinbashi, 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 BEAM APPARATUS AND DISPLACEMENT DETECTING CIRCUIT

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) Hiroshi Tsuji | 2/4/2009 |
| 1) Hiroshi Tsuji 2) Navma Ban | 2/5/2009 |
| 3) | |
| 4) | · · · · · · · · · · · · · · · · · · · |
| 5) | |
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| 7) | |
| 8) | |
| 9) | |
| 10) | |

PATENT REEL: 022268 FRAME: 0235

| RECORDATION FORM COVER SHEET | | | |
|--|---|--|--|
| Docket No.: 075905-0089 PATENTS | ONLY | | |
| To the Director of the U. S. Patent and Trademark Office: Please record the attached documents or the new address(es) below. | | | |
| 1. Name of Conveying Party(ies) | 2. Name and address of receiving party(ies) | | |
| Hiroshi TSUJI, Naoma BAN | Name: HITACHI HIGH-TECHNOLOGIES | | |
| | CORPORATION | | |
| | Internal Address: | | |
| Additional name(s) of conveying party(ies) attached? Yes No | | | |
| 3. Nature of Conveyance/Execution Date(s) | Address: 1-24-14, Nishi Shinbashi, Minato-ku, Tokyo, | | |
| | JAPAN | | |
| Execution Date(s): February 4, 2009; February 5, 2009 | | | |
| (respectively) | | | |
| | , | | |
| ☐ Security Agreement ☐ Change of Name | | | |
| ☐ Joint Research Agreement | | | |
| Government Interest Assignment | | | |
| Executive Order 9424, Confirmatory License | | | |
| Other | 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). | B. Patent No(s). | | |
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| Additional numbers attac | · ———————————————————————————————————— | | |
| 5. Name and address to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: | | |
| Name: MCDERMOTT WILL & EMERY LLP | 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 | | |
| Internal Address: | Authorized to be charged by credit card | | |
| internal Address. | Authorized to be charged to deposit account | | |
| Street Address: 600 13th Street, N.W. | Enclosed | | |
| Succi Address. 000 13th Succi, N.W. | None required (government interest not affecting title) | | |
| City: Washington State: D. C. Zip: 20005-3096 | 140the required (government interest not affecting title) | | |
| City: Washington State: D. C. Zip: 20005-3096 Phone Number: 202.756.8000 | 8. Payment Information: | | |
| Fax Number: 202.756.8087 | o. Fayment information: | | |
| Email Address: | a. Credit Card Last 4 Numbers | | |
| Email Address: | a. Credit Card Last 4 Numbers Expiration Date | | |
| | b. Deposit Account Number 500417 | | |
| | Authorized User Name | | |
| 0.53 | | | |
| 9. Signature. | 1 it 6 / 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | | |
| Keith E. George 34,111 | Ell 7, 9 (17) February 17, 2009 | | |
| Name and Registration No. of Person Signing | Signature Date | | |
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PATENT
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