

04-27-2006

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OMB No. 0651-0027 (Exp. 6/30/2008)U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

APR 21 2006

103226754

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):

Takashi Takahashi

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

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

Execution Date(s): December 8, 2005

- ☒ 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: Ricoh Company, Ltd.

Internal Address:

Street Address:

3-6, Nakamagome 1-chome  
Ohta-ku, Tokyo 143-8555  
JAPAN

City:

State:

Country: Zip:

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

## 4. Application or patent number(s):

A. Patent Application No.(s)

10/560,247

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

B. Patent No.(s)

Additional numbers attached?

☐ Yes ☒ No

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

Name: Mark J. Thronson  
DICKSTEIN SHAPIRO MORIN & OSHINSKY  
LLP

Internal Address: Atty. Dkt.: R2184.0471/P471

Street Address: 2101 L Street NW

City: Washington

State: DC Zip: 20037-1526

Phone Number: (202) 775-4742

Fax Number: (202) 887-0689

Email Address: ThronsonM@DSMO.com

## 6. Total number of applications and patents involved:

1

## 7. Total fee (37 CFR 1.21(h) &amp; 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 1002

Expiration Date 01/07

b. Deposit Account Number

Authorized User Name

## 9. Signature:

Signature

Mark J. Thronson - 33,082

Name of Person Signing

04/24/2006 JADDD April 20, 2006

01 FC:8021

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

40.00 OP

# ASSIGNMENT BY INVENTORS

**THIS ASSIGNMENT**, by TAKASHI TAKAHASHI and \_\_\_\_\_,

(hereinafter referred to as "Assignors"), residing at Miyagi, Japan

and \_\_\_\_\_, respectively;

**WHEREAS**, Assignors have invented certain new and useful improvements in

VERTICAL CAVITY SURFACE EMITTING SEMICONDUCTOR LASER, LIGHT

EMISSION DEVICE, AND OPTICAL TRANSMISSION SYSTEM, set forth in

a patent application for Letters Patent of the United States, executed concurrently herewith; and

**WHEREAS**, Ricoh Company, Ltd. (hereinafter referred to as "Assignee"), having

offices at 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555, Japan, is desirous of

acquiring the entire right, title and interest in and to said inventions and said Application for

Letters Patent of the United States, and in and to any Letters Patent of the United States to be

obtained therefor and thereon.

**NOW, THEREFORE**, in consideration of One Dollar (\$1.00) and other good and

sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold,

assigned, transferred and set over, and by these presents do sell, assign, transfer and set over,

unto Assignee, its successors, legal representatives and assigns, the entire right, title and

interest in and to the above-mentioned inventions and application for Letters Patent, and in and

to any and all direct and indirect divisions, continuations and continuations-in-part of said

application, and any and all Letters Patent in the United States and all foreign countries which

may be granted therefor and thereon, and reissues, reexaminations and extensions of said

Letters Patent, and all rights under the International Convention for the Protection of Industrial

Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use

and benefit of its successors, legal representatives and assigns, to the full end of the term or

terms for which Letters Patent may be granted and/or extended, as fully and entirely as the

same would have been held and enjoyed by Assignors, had this sale and assignment not been

made.

**AND** for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

**AND** for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

**AND** Assignors hereby request the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

**AND** Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document: Edward A. Meilman, Reg. No. 24,735, Gary M. Hoffman, Reg. No. 26,411, Steven I. Weisburd, Reg. No. 27,409, Thomas J. D'Amico, Reg. No. 28,371, Donald A. Gregory, Reg.

No. 28,954, Stephen A. Soffen, Reg. No. 31,063, James W. Brady, Jr., Reg. No. 32,115, Jon D. Grossman, Reg. No. 32,699, Mark J. Thronson, Reg. No. 33,082, Michael J. Scheer, Reg. No. 34,425, and Eric Oliver, Reg. No. 35,307, of Dickstein Shapiro Morin & Oshinsky LLP.

**AND** Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

**Assignors:**

*Takashi Takahashi*

TAKASHI TAKAHASHI

Date: December 8, 2005

**Witnesses:**

*[Signature]*

Date: December 8, 2005

*[Signature]*

Date: December 8, 2005

RECORDATION FORM COVER SHEET

PATENTS ONLY

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Signature

April 20, 2006

Date

Mark J. Thronson - 33,082

Name of Person Signing

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