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



103214618

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

4-3-06

1. Name of conveying party(ies):

Takashi Takahashi

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

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

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

Execution Date(s): March 2, 2006

Assignment Merger Change of Name

Security Agreement Joint Research Agreement

Government Interest Assignment

Executive Order 9424, Confirmatory License

Other _____

4. Application or patent number(s):

A. Patent Application No.(s)

11/344,421

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
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LLP

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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 1002

Expiration Date 01/07

b. Deposit Account Number _____

Authorized User Name _____

9. Signature:

Signature

Mark J. Thronson - 33,082

Name of Person Signing

April 3, 2006

Date

Total number of pages including cover sheet, attachments, and documents: 4

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 DEVICE, OPTICAL TRANSMISSION MODULE, OPTICAL TRANSMISSION DEVICE, AND OPTICAL SWITCHING METHOD, 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: March 2, 2006

Date: _____

Date: _____

Date: _____

Witnesses:

[Signature]

Date: March 2, 2006

Hirayuki Morota

Date: March 2, 2006