

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the First and Second Assignee's Name and Second Assignee's Address previously recorded on Reel 019791 Frame 0286. Assignor(s) hereby confirms the entire right, title, and interest.

**CONVEYING PARTY DATA**

Name	Execution Date
Tsuyoshi Suzudo	07/05/2007
Takunori Taira	07/13/2007
Yoichi Sato	07/11/2007
Yasunori Furukawa	07/23/2007
Sadao Matsumura	07/23/2007
Makoto Matsukura	07/24/2007
Osamu Nakamura	07/24/2007
Shinya Watanabe	07/26/2007
Akio Miyamoto	07/23/2007

**RECEIVING PARTY DATA**

<b>Name:</b>	RICOH COMPANY, LTD
<b>Street Address:</b>	3-6, Nakamagome 1-chome, Ohta-ku
<b>City:</b>	Tokyo
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	143-8555

<b>Name:</b>	National Institutes of Natural Sciences
<b>Street Address:</b>	21-1, Osawa, 2-chome, Mitaka-shi
<b>City:</b>	Tokyo
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	181-8588

<b>Name:</b>	Oxide Corporation
<b>Street Address:</b>	1747-1 Maginohara, Mukawacho, Hokuto-shi
<b>City:</b>	Yamanashi
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	408-0302

OP \$40.00 11812955

**PATENT**

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11812955

CORRESPONDENCE DATA

Fax Number: (202)420-2201  
*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*  
Phone: 202-420-2200  
Email: harrisp@dicksteinshapiro.com  
Correspondent Name: Dickstein Shapiro, LLP  
Address Line 1: 1825 Eye Street, NW  
Address Line 4: Washington, DISTRICT OF COLUMBIA 20006

ATTORNEY DOCKET NUMBER: R2184.0593/P593

NAME OF SUBMITTER: Penny Harris

Total Attachments: 9  
source=0593reqtocnor#page1.tif  
source=0593reqtocnor#page2.tif  
source=0593reqtocnor#page3.tif  
source=0593reqtocnor#page4.tif  
source=0593reqtocnor#page5.tif  
source=0593reqtocnor#page6.tif  
source=0593reqtocnor#page7.tif  
source=0593reqtocnor#page8.tif  
source=0593reqtocnor#page9.tif

09-05-2007



HEET

103441829

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

Transmit enclosed documents or the new address(es) below.

1. Name of conveying party(ies):

Tsuyoshi Suzudo (07/05/2007), Takunori Taira (07/13/2007), Yoichi Sato (07/11/2007), Yasunori Furukawa (07/23/2007),

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: 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)  
11/812,955

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 LLP

Internal Address: Atty. Dkt.: R2184.0593/P593

Street Address: 1825 Eye Street, NW

City: Washington  
State: DC Zip: 20006-5403  
Phone Number: (202) 420-4742  
Fax Number: (202) 420-2201  
Email Address: ThronsonM@dicksteinshapiro.com

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 01/11

b. Deposit Account Number \_\_\_\_\_  
Authorized User Name \_\_\_\_\_

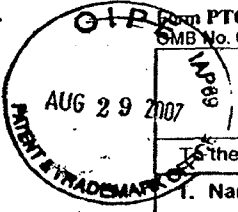
9. Signature:

Signature

August 24, 2007  
Date

Mark J. Thronson - 33,082  
Name of Person Signing

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



8.29.07

RECORDATION FORM COVER SHEET (PTO-159)  
(supplemental sheet)

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

Sadao Matsumura (07/23/2007), Makoto Matsukura (07/24/2007), Osamu Nakamura (07/24/2007),  
Shinya Watanabe (07/26/2007), and Akio Miyamoto (07/23/2007)

Additional Assignees (2. Continued):

Assignee Name: National Institutes of Natural Sciences

Internal Address:

Street Address: 21-1, Osawa  
2-chome, Mitaka-shi  
Tokyo  
181-8511; JAPAN  
8588

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

Assignee Name: Oxide Corporation

Internal Address:

Street Address: 1747-1 Maginohara  
Mukawacho  
Hokuto-shi  
Yamanashi; 408-0302; JAPAN

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

## ASSIGNMENT

THIS ASSIGNMENT, by TSUYOSHI SUZUDO, TAKUNORI TAIRA, YOICHI SATO, YASUNORI FURUKAWA, SADA0 MATSUMURA, MAKOTO MATSUKURA, OSAMU NAKAMURA, SHINYA WATANABE and, AKIO MIYAMOTO (hereinafter referred to as "Assignors"), residing at Miyagi, Japan, Aichi, Japan, Aichi, Japan, Yamanashi, Japan, Yamanashi, Japan, Yamanashi, Japan, Yamanashi, Japan, Yamanashi, Japan, and Yamanashi, Japan, respectively;

WHEREAS, Assignors have invented certain new and useful improvements in LASER-DIODE PUMPED SOLID-STATE LASER APPARATUS, OPTICAL SCANNING APPARATUS, IMAGE FORMING APPARATUS AND DISPLAY APPARATUS, set forth in a patent application for Letters Patent of the United States, executed concurrently herewith; and

WHEREAS, Ricoh Company, Ltd., National Institutes of Natural Sciences and Oxide Corporation (hereinafter referred to as "Assignee"), having offices at 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan, 21-1, Osawa 2-chome, Mitaka-shi, Tokyo 181-8588, Japan and 1747-1, Maginohara, Mukawacho, Hokuto-shi, Yamanashi 408-0302, 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 Director of the United States Patent and Trademark Office 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: All practitioners associated with Customer Number 24998 (Dickstein Shapiro LLP).

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

July 5, 2007  
Date

Isuyoshi Suzudo  
TSUYOSHI SUZUDO

July 13, 2007  
Date

Takunori Taira  
TAKUNORI TAIRA

July 11, 2007  
Date

Yoichi Sato  
YOICHI SATO

July 23, 2007  
Date

Yasunori Furukawa  
YASUNORI FURUKAWA

July 23 2007

Date

S. Matsumura

SADAO MATSUMURA

July 24 2007

Date

Makoto Matsukura

MAKOTO MATSUKURA

July 24 2007

Date

Osamu Nakamura

OSAMU NAKAMURA

July 26 2007

Date

Shinya Watanabe

SHINYA WATANABE

July 28 2007

Date

Akio Miyamoto

AKIO MIYAMOTO

July 26, 2007

Date

[Signature]

Witness

July 26, 2007

Date

[Signature]

Witness