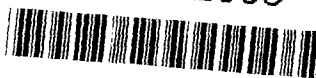




05-31-2005

DEPT. OF COMMERCE
Patent and Trademark Office

RECORDATION F
PATENT



103011963

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):

Hideaki Hirai (03/14/2005) and Kazuhiro Umeki
(03/21/2005)

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-kui
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): in parentheses after inventor name

- ☒ 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):

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

A. Patent Application No.(s)

11/068,348

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

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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 1008

Expiration Date 02/28/06

b. Deposit Account Number _____

Authorized User Name _____

9. Signature:

Signature

Mark J. Thronson - 33,082

Name of Person Signing

May 23, 2005

Date

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

4

05/25/2005 JAD/D01 00000091 11068348

02 FC:8021

(40.00 DP)

RECORDATION FORM COVER SHEET
(continued)

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

Additional Assignees (2. Continued):

Assignee Name: Ricoh Optical Industries Co., Ltd.

Internal Address:

Street Address: 10-109, Ohhata
Hanamaki-shi
Iwate 025-0303
JAPAN

City: State: Country: Zip:

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

ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT, by HIDEAKI HIRAI, and KAZUHIRO UMEKI (hereinafter referred to as "Assignors"), residing at Kanagawa, Japan, and Iwate, Japan, respectively;

WHEREAS, Assignors have invented certain new and useful improvements in OPTICAL DEVICE, METHOD OF PRODUCING THE SAME, OPTICAL PICKUP, AND OPTICAL INFORMATION PROCESSING DEVICE, set forth in a patent application for Letters Patent of the United States, executed concurrently herewith; and

WHEREAS, Ricoh Company, Ltd. and Ricoh Optical Industries Co., Ltd. (hereinafter referred to as "Assignee"), having offices at 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555, Japan and 10-109, Ohhata, Hanamaki-shi, Iwate 025-0303, Japan, are 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:

Hideaki Hirai
HIDEAKI HIRAI

Date: March 14, 2005

Kazuhiro Umekei
KAZUHIRO UMEKI

Date: March 21, 2005

Date: _____

Date: _____

Witnesses:

Toshinao Takahashi

Date: March 21, 2005

Emiko Satou

Date: March 21, 2005