

09-03-2004

Form PTO-1595 (Rev. 06/04)
OMB No. 0651-0027 (exp. 6/30/2005)U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

102829723

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)/Execution Date(s):Hiroaki ITOH (07/13/2004), Naruichi YOKOGAWA
(07/13/2004), and Takao MATSUI (07/09/2004)

Execution Dates: in parentheses after inventor name

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No**3. Nature of Conveyance:**

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

2. Name and address of receiving party(ies)

Name: Sharp Kabushiki Kaisha

Internal Address: _____

Street Address: _____

22-22, Nagaike-cho, Abeno-ku
Osaka-Shi, Osaka
545-8522
JAPAN

City: _____

State: _____

Country: _____ Zip: _____

Additional name(s) & address(es) attached: ☐ Yes ☒ No**4. Application or patent number(s):**

A. Patent Application No.(s)

NEW

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

B. Patent No.(s)

101928087

Additional numbers attached? ☐ Yes ☒ No**5. Name and address to whom correspondence concerning document should be mailed:**Name: Charles Gorenstein
BIRCH, STEWART, KOLASCH & BIRCH,
LLP

Internal Address: Atty. Dkt.: 1248-0741PUS1

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Suite 100 East
P.O. Box 747

City: Falls Church

State: VA Zip: 22040-0747

Phone Number: (703) 205-8000

Fax Number: (703) 205-8050

Email Address: _____

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 to 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 _____

Expiration Date _____

b. Deposit Account Number _____

Authorized User Name _____

9. Signature.Charles Gorenstein
Pub # 57327

August 30, 2004

Signature

Date

Charles Gorenstein - 29,271

Name of Person Signing

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

5

CG/DSS/smt

08/31/2004 HLE333 00000022 10928087

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PATENT
REEL: 015743 FRAME: 0611

BIRCH, STEWART, KOLASCH & BIRCH, LLP

UNITED STATES PATENT RIGHTS, OR
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

Application No. NEWFiled 8-30-04Insert Name(s)
of Inventor(s)

*** (Given Name FAMILY NAME (ALL CAPS)) ***

WHEREAS, Hiroaki ITOH ; Naruichi YOKOGAWA_____

(hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in

Insert Title
of Invention

RECEIVING CIRCUIT FOR FREE-SPACE OPTICAL COMMUNICATION

for which an application for Letters Patent of the United States of America has been executed by the undersigned (except in the case of a provisional application).

Insert Date
of Signing of
Applicationon July 13, 2004 ; andInsert Name
of AssigneeWHEREAS, SHARP KABUSHIKI KAISHAInsert Address
of Assigneeof 22-22, Nagaike-cho Abeno-ku Osaka-shi Osaka 545-8522 Japan

its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and

CHECK BOX
IF APPROPRIATE☐ in any foreign countries.

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries;

and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree (s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP 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 U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date July 13, 2004

Name of Inventor Hiroaki Itoh
(signature) Hiroaki ITOH

Date July 13, 2004

Name of Inventor Naruichi Yokogawa
(signature) Naruichi YOKOGAWA

Date _____

Name of Inventor _____
(signature)

Date _____

Name of Inventor _____
(signature)

Date _____

Name of Inventor _____
(signature)

Date _____

Name of Inventor _____
(signature)

BIRCH, STEWART, KOLASCH & BIRCH, LLP

UNITED STATES PATENT RIGHTS, OR
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

Application No. NEWFiled 8-30-04Insert Name(s)
of Inventor(s)

*** (Given Name FAMILY NAME (ALL CAPS)) ***

WHEREAS, Takao MATSUI ;

_____ ;

_____ ;

_____ ;

_____ ;

_____ ;

_____ ;

(hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in

Insert Title
of Invention

RECEIVING CIRCUIT FOR FREE-SPACE OPTICAL COMMUNICATION

for which an application for Letters Patent of the United States of America has been executed by the undersigned (except in the case of a provisional application).

Insert Date
of Signing of
Applicationon 9 July 2004 ; andInsert Name
of AssigneeWHEREAS, SHARP KABUSHIKI KAISHAInsert Address
of Assigneeof 22-22, Nagaike-cho Abeno-ku Osaka-shi Osaka 545-8522 Japan

its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and

☐ in any foreign countries.

CHECK BOX
IF APPROPRIATE

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries;

and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

BEST AVAILABLE COPY

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

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The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

BEST AVAILABLE COPY

Date 9 July 2004

Name of Inventor Takao Matsui
(signature) Takao MATSUI

Date _____

Name of Inventor _____
(signature)

Date _____

Name of Inventor _____
(signature)

Date _____

Name of Inventor _____
(signature)

Date _____

Name of Inventor _____
(signature)

Date _____

Name of Inventor _____
(signature)