

FORM PTO-16/9A  
Expires 06/01/02

10-16-2001

U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**

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**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

09-801548

U.S. PTO  
09/801548

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

**Submission Type**

New

Resubmission (Non-Recordation)  
Document ID# \_\_\_\_\_

Correction of PTO Error  
Reel # \_\_\_\_\_ Frame # \_\_\_\_\_

Corrective Document  
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**Conveyance Type**

Assignment  Security Agreement

License  Change of Name

Merger  Other \_\_\_\_\_

**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)

Departmental File  Secret File

**Conveying Party(ies)**

Mark if additional names of conveying parties attached

Name (line 1) Tadashi TAKABA Execution Date: Month 02 Day 09 Year 01

Name (line 2) \_\_\_\_\_

**Second Party**

Name (line 1) Masanobu SHIGYO Execution Date: Month 02 Day 09 Year 01

Name (line 2) \_\_\_\_\_

**Receiving Party**

Mark if additional names of receiving parties attached

Name (line 1) FUJITSU LIMITED

Name (line 2) \_\_\_\_\_

Address (line 1) 1-1, Kamikodanaka, 4-chome

Address (line 2) Nakahara-ku, Kawasaki-shi

Address (line 3) Kanagawa Japan 211-8588  
City State/Country Zip Code

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name \_\_\_\_\_

Address (line 1) \_\_\_\_\_

Address (line 2) \_\_\_\_\_

Address (line 3) \_\_\_\_\_

Address (line 4) \_\_\_\_\_

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03/12/2001 NPRASASD 00000007 09801548

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02 FC:581

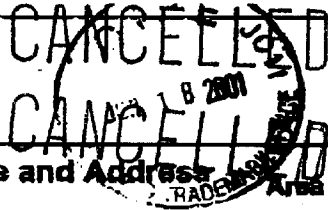
Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and entering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Cover Sheet Reporting Office, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0521-0027), Washington, D.C. 20503. See OMB Information Collection Burden Package 0521-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:  
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FORM PTO-1619B  
Expires 08/30/99  
OMB 0651-0027

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U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**



**Correspondent Name and Address** Area Code and Telephone Number

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**Pages** Enter the total number of pages of the attached conveyance document including any attachments. #

**Application Number(s) or Patent Number(s)**  Mark if additional numbers attached  
Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).  
Patent Application Number(s) Patent Number(s)  

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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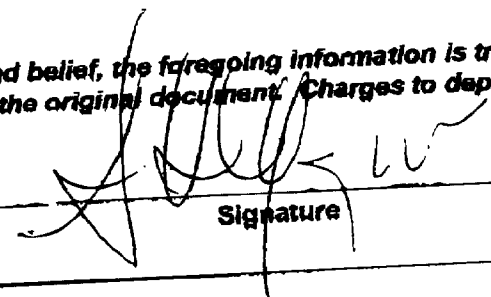
If this document is being filed together with a U.S. Patent Application, enter the date the patent application was signed by the first named executing inventor. Month Day Year

**Patent Cooperation Treaty (PCT)**  
Enter PCT application number only if a U.S. Application Number has not been assigned.  
PCT  PCT  PCT   
PCT  PCT  PCT

**Number of Properties** Enter the total number of properties involved. #

**Fee Amount** Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment: Enclosed  Deposit Account   
Deposit Account  
(Enter for payment by deposit account or if additional fees can be charged to the account.)  
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**Statement and Signature**  
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.  
Samson Helfgott  
Name of Person Signing  Signature  
Date

FORM PTO-1519C  
Expires 08/30/04  
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# RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**

## Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Yukimasa TAKAHIRA

Execution Date  
Month Day Year  
02 09 01

Name (line 2)

Name (line 1) Junji SATOH

Execution Date  
Month Day Year  
02 09 01

Name (line 2)

Name (line 1) Kusuo YONEZAWA

Execution Date  
Month Day Year  
02 09 01

Name (line 2)

## Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

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## Application Number(s) or Patent Number(s)

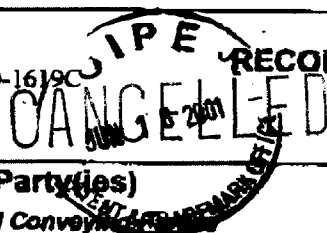
Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)


FORM PTO-1619C  
Expires 06/30/99  
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# RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**

## Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Party(ies)

Name (line 1) Hidetoshi KAWAKAMI

Execution Date  
Month Day Year

02 09 01

Name (line 2) \_\_\_\_\_

Execution Date  
Month Day Year

Name (line 1) Koji KAWASE

02 09 01

Name (line 2) \_\_\_\_\_

Execution Date  
Month Day Year

Name (line 1) Hiroshi ITOH

02 13 01

Name (line 2) \_\_\_\_\_

## Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1) \_\_\_\_\_

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2) \_\_\_\_\_

Address (line 1) \_\_\_\_\_

Address (line 2) \_\_\_\_\_

Address (line 3) \_\_\_\_\_

City

State/Country

Zip Code

Name (line 1) \_\_\_\_\_

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2) \_\_\_\_\_

Address (line 1) \_\_\_\_\_

Address (line 2) \_\_\_\_\_

Address (line 3) \_\_\_\_\_

City

State/Country

Zip Code

## Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

### Patent Application Number(s)

### Patent Number(s)



UNITED STATES

ASSIGNMENT

Docket No. FUJS 18.380

WHEREAS, the below named inventor, ASSIGNOR, has made a certain new and useful invention in : MULTIMEDIA SIGNAL PROCESSING APPARATUS

for which

- (check one)  an application is being filed concurrently herewith.
- an application for a Patent of the United States was filed on \_\_\_\_\_
- and given Application Serial No. \_\_\_\_\_

and WHEREAS, FUJITSU LIMITED  
having a place of business at 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588 Japan, ASSIGNEE

is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, the said ASSIGNOR, has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventor's certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND ASSIGNOR covenants and agrees that he has full right to convey the entire interest herein assigned, and has not executed, and will not execute, any agreement in conflict herewith.

AND ASSIGNOR further covenants and agrees that he will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

Full name of sole or first inventor Tadashi TAKABA  
 Inventor's signature Tadashi Takaba Date February 9, 2001  
 Residence Fukuoka, Japan Citizenship Japanese  
 Post Office Address c/o FUJITSU NISHI-NIHON COMMUNICATION SYSTEMS LIMITED,  
2-1, Momochihama 2-chome, Sawara-ku, Fukuoka-shi,  
Fukuoka 814-8588 Japan

Full name of second joint inventor, if any Masanobu SHIGYO  
 Second Inventor's signature Masanobu Shigyo Date February 9, 2001  
 Residence Fukuoka, Japan Citizenship Japanese  
 Post Office Address c/o FUJITSU NISHI-NIHON COMMUNICATION SYSTEMS LIMITED,  
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Fukuoka 814-8588 Japan

Full name of third joint inventor, if any Yukimasa TAKAHIRA  
 Third Inventor's signature Yukimasa Takahira Date February 9, 2001  
 Residence Fukuoka, Japan Citizenship Japanese  
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Fukuoka 814-8588 Japan

Full name of fourth joint inventor, if any Junji SATOH  
 Inventor's Signature *Junji Satoh* Date February 9, 2001  
 Residence Fukuoka, Japan

Citizenship Japanese

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Full name of fifth joint inventor, if any Kusuo YONEZAWA  
 Inventor's Signature *Kusuo Yonezawa* Date February 9, 2001  
 Residence Fukuoka, Japan

Citizenship Japanese

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Full name of sixth joint inventor, if any Hidetoshi KAWAKAMI  
 Inventor's Signature *Hidetoshi Kawakami* Date February 9, 2001  
 Residence Fukuoka, Japan

Citizenship Japanese

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Full name of seventh joint inventor, if any Koji KAWASE  
 Inventor's Signature *Koji Kawase* Date February 9, 2001  
 Residence Fukuoka, Japan

Citizenship Japanese

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2-1, Momochihama 2-chome, Sawara-ku, Fukuoka-shi, Fukuoka 814-8588 Japan

Full name of eighth joint inventor, if any Hiroshi ITOH  
 Inventor's Signature *Hiroshi Itoh* Date February 13, 2001  
 Residence Kawasaki, Japan

Citizenship Japanese

Post Office Address c/o FUJITSU LIMITED, 1-1, Kamikodanaka 4-chome, Nakahara-ku,  
Kawasaki-shi, Kanagawa 211-8588 Japan