

10-15-2001



FORM PTO-1619A  
Expires 06/30/99  
OMB 0651-0027

101873537

Department of Commerce  
Patent and Trademark Office

PATENT

OCT -2 2001

10-2-01

RECORDATION FORM COVER SHEET  
PATENTS ONLY

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  
Reel #  Frame #

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)

Execution Date		
Month	Day	Year
06	18	01

Name (line 2)

Second Party

Name (line 1)

Execution Date		
Month	Day	Year
06	18	01

Name (line 2)

Receiving Party

Mark if additional names of receiving parties attached

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

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)

FOR OFFICE USE ONLY

10/15/2001 6TOM11 00000004 301290 09886268

01 FC:5B1 40.00 CH

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 gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practices. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:  
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

PATENT  
REEL: 12234 FRAME: 0331

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

**Name**

**Address (line 1)**

**Address (line 2)**

**Address (line 3)**

**Address (line 4)**

**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" value="09886268"/>	<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"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.     

**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

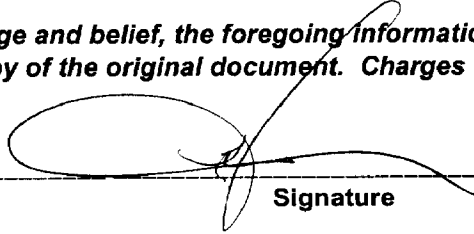
**Deposit Account**  
(Enter for payment by deposit account or if additional fees can be charged to the account.)

**Deposit Account Number:** #

**Authorization to charge additional fees:**      Yes       No


**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.*

Harris A. Wolin            10/02/2001

-----  
Name of Person Signing      Signature      Date

ANY FEE DUE WITH THIS PAPER, NOT FULLY COVERED BY AN ENCLOSED CHECK, MAY BE CHARGED ON DEPOSIT ACCOUNT NO. 501290

Filed by Express Mail  
(Receipt No. EL868046521UJ)  
on October 2, 2001  
pursuant to 37 C.F.R. 110.  
by 

**PATENT**  
REEL: 12234 FRAME: 0332

RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Nobuhiro RIKITAKE

Execution Date  
Month Day Year  
06 18 01

Name (line 2)

Name (line 1) Hideki MATSUI

Execution Date  
Month Day Year  
06 18 01

Name (line 2)

Name (line 1) Hirotaka MORITA

Execution Date  
Month Day Year  
06 18 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

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.)

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.)

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)

5506709		
5712943		
6043867		
5652588		

## ASSIGNMENT

Docket No. FUJR 18.748

WHEREAS, the below named inventor, ASSIGNOR, has made a certain new and useful invention in : \_\_\_\_\_  
TRANSMISSION SYSTEM

for which

(check one)  an application is being filed concurrently herewith,  
 an application for a Patent of the United States was filed on June 21, 2001  
 and given Application Serial No. 09/886,268

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 Koji TAKEGUCHI  
 Inventor's signature *Koji Takeguchi* *Koji Takeguchi* Date June 18, 2001  
 Residence Texas, U.S.A. Citizenship Japanese  
 Post Office Address c/o FUJITSU NETWORK COMMUNICATIONS, Inc., 2801 Telecom Parkway  
Richardson, Texas 75082 U.S.A.

Full name of second joint inventor, if any Ryuichi MORIYA  
 Second Inventor's signature *Ryuichi Moriya* Date June 18, 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

Full name of third joint inventor, if any Nobuhiro RIKITAKE  
 Third Inventor's signature *Nobuhiro Rikitake* Date June 18, 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

Full name of fourth joint inventor, if any Hideki MATSUI

Inventor's Signature Hideki Matsui Date June 18, 2001

Residence Texas, U.S.A.

Citizenship Japanese

Post Office Address c/o FUJITSU NETWORK COMMUNICATIONS, Inc., 2801 Telecom Parkway Richardson, Texas 75082 U.S.A.

Full name of fifth joint inventor, if any Hiroataka MORITA

Inventor's Signature Hiroataka Morita Date June 18, 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

Full name of sixth joint inventor, if any \_\_\_\_\_

Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_

Residence \_\_\_\_\_

Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_

Full name of seventh joint inventor, if any \_\_\_\_\_

Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_

Residence \_\_\_\_\_

Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_

Full name of eighth joint inventor, if any \_\_\_\_\_

Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_

Residence \_\_\_\_\_

Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_