FORM PTO-1619A
Expires 06/30/99
OMB 0651-0627

08-09-2000



101430123

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

## RECORDATION FORM COVER SHEET PATENTS ONLY

TO: The Commissioner of Potents and Tradem	PATENTS ONLY parks: Please record the attached original document(s) or copy(ies).
Submission Type	Conveyance Type
X New	X Assignment Security Agreement
Resubmission (Non-Recordation) Document ID#	License Change of Name
Correction of PTO Error Reel # Frame #	Merger Other U.S. Government
Corrective Document Reel # Frame #	(For Use ONLY by U.S. Government Agencies)  Departmental File Secret File
Conveying Party(ies)	Mark if additional names of conveying parties attached Execution Date Month Day Year
Name (line 1) Noboru KOBAYASHI	7/3/00
Name (line 2)	F
Second Party	Execution Date Month Day Yes
Name (line 1) Naoji FUJINO	7/3/00
Name (line 2)	
Receiving Party	Mark if additional names of receiving parties attached
Name (line 1) FUJITSU LIMITED	If document to be recisan assignment and
Name (line 2)	receiving party is not domiciled in the Unite
Address (line 1) 1-1 Kamikodanaka 4-chome I	States, an appointment of a domestic representative is attached
Address (line 1) 1-1, Kamikodanaka 4-chome, I	Nakahara-ku, (Designation must be separate document fr
Address (line 2) Kawasaki-shi,	Assignment.)
000 95895 (lin 03000043 09625 163 magawa	Japan 211-8588
Domestic Representative Mame and	Address Enter for the first Receiving Party only.
Name	
Address (line 1)	
Address (line 2)	
Address (line 3)	
`	
Address (line 4)	
Address (line 4)	FOR OFFICE USE ONLY

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 Practice. 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: 010973 FRAME: 0799** 

FORM -PTO-1619B Expires 06/30/99 OMB 0651-0027	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspondent Name and Address	Area Code and Telephone Number	(212)643-5000
Name Helfgott & Karas, P.C.		
Address (line 1) Empire State Building		
Address (line 2) 60th Floor		
Address (line 3) New York, New York 10118		
Address (line 4) Attorney Docket No.: FUJS	17.557	
Pages Enter the total number of p including any attachments	pages of the attached conveyance docu s.	ment # 4
Application Number(s) or Patent Nu	· · · · · · · · · · · · · · · · · · ·	f additional numbers attached
Patent Application Number(s)  If this document is being filed together with a new Pasigned by the first named executing inventor.  Patent Cooperation Treaty (PCT)  Enter PCT application number only if a U.S. Application Numb has not been assigned.  Number of Properties	PCT PCT PCT PCT	nt Number(s)
	nt for Properties Listed (37 CFR 3.41):	\$ 40.00
Method of Payment: End Deposit Account	dditional fees can be charged to the account.)  Deposit Account Number:	#[08-1634
Statement and Signature	Authorization to charge additional fees:	Yes 🔼 No
To the best of my knowledge and	belief, the foregoing information is true e original document. Charges to depos Signature	and correct and any it account are authorized, as  7/25/00  Date

PATENT REEL: 010973 FRAME: 0800 FORM PTO-1619C Expires 06/30/99 OMB 0651-0027

## RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

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

	TATENTO ONET	
Conveying Pa	mark is additional frames of conveying parties attached	Execution Date
Enter additional C		Month Day Y
Name (line 1) Hi	deaki KURIHARA	7/3/00
Name (line 2)		7.8.7.8.
		Execution Date Month Day Year
Name (line 1) Fu	miaki NISHIDA	7/3/00
Name (line 2)		Execution Date
Name (line 1)		Month Day Year
Name (line 2)		
Receiving Par	ty(ies) Mark if additional names of receiving partie	es attached
Enter additional R	eceiving Party(ies)	
Name (line 1)		If document to be recorded is an assignment and the
Name (line 2)		receiving party is not domiciled in the United States, an appointment
Address (line 1)		of a domestic representative is attached. (Designation must be a separate
Address (line 2)		document from Assignment.)
Address (line 3)	City State/Country Zip Cod	de
Name (line 1)		If document to be recorded is an assignment and the
Name (line 2)		receiving party is not domiciled in the United States, an appointment of a
Address (line 1)		domestic representative is attached. (Designation must be a separate document from
Address (line 2)		Assignment.)
Address (line 3)	City State/Country Zip C	Code
Application N	umber(s) or Patent Number(s) Mark if additional numbers attached	
	Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the sa	ame property).
Pa	tent Application Number(s) Patent Numl	ber(s)

PATENT

**REEL: 010973 FRAME: 0801** 

## UNITED STATES

## ASSIGNMENT

Docket No. FUJS 17.557

WHEREAS, the below named inventor, ASSIGNOR, has made a certain new and useful invention in:  MULTI-CHANNEL SIGNAL PROCESSING APPARATUS
for which
(check one) [V] 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:
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 h
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 Noboru KOBAYASHI
inventor's signature Notom Kotongsh Date July 3, 2000
Residence Kawasaki-shi, Kanagawa, Japan Citizenship Japanese
Post Office Address C/O FUJITSU LIMITED, 1-1, Kamikodanaka
4-chome, Nakahara-ku, Kawasaki-shi,
Kanagawa 211-8588 Japan
Naoi FIIINO

PATENT REEL: 010973 FRAME: 0802

Full name of fourth joint inventor, if any	Fumiaki NISHI	DA	
Inventor's Signature Fumaki Nishida	Date	July 3, 2000	
Residence Kawasaki-shi, Kanagawa, Japan			
	Citizenship	Japanese	
Post Office Address c/o FUJITSU LIMITED,	1-1, Kamikod	anaka	
4-chome, Nakahara-ku, Kawasaki-shi, Kanag	gawa 211-8588	Japan	
Full name of fifth joint inventor, if any			
Inventor's Signature	Date		
Residence		·	
Citizenship			
Post Office Address			
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			
Residence			
	Citizenship		
Post Office Address	-		

**RECORDED: 07/25/2000** 

PATENT REEL: 010973 FRAME: 0803