FORM PTO-1595 12/5/00 12-22-2	2000 HEET U.S. DEPARTMENT OF COMMERCE				
	Patent and Trademark Office				
To the Honorable Commissioner of F 101558307 attached original documents or copy thereof.					
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):				
Kazushi Takanashi and Takeshi Akiyama Additional name(s) of conveying party(ies) attached? Yes No	Name: <u>Matsushita Electric Industrial Co., Ltd.</u> Internal Address:				
3. Nature of Conveyance:					
Assignment Merger	Street Address: 1006, Kadoma, Kadoma, Shi				
□ Security Agreement □ Change of Name	City: Osaka State: JAPAN Zip:				
☐ Other Execution Date: <u>November 14, 2000; November</u> 4, 2000_	Additional name(s) of receiving party(ies) attached? □ Yes ⊠ No				
4. Application number(s) or patent number(s):					
If this document is being filed together with a new application, November 14, 2000; November 14, 2000	, the execution date of the application is:				
A. Patent Application No.(s): 09(730188 08/2000 DTESSEM1 00000070 09730166 FC:581 40.00 10 Additional number(s) at	B. Patent No.(s): 				
 Name and address of party to whom correspondence concerning this document should be mailed: 	me and address of party to whom correspondence accerning this document should be mailed: 6. Total number of applications and patents involved: 1				
Name: Michael W. Garvey					
Street Address: 526 Superior Avenue, East	7. Total Fee (37 C.F.R. §3.41)\$40.00				
Suite 1200	Enclosed				
	□ Authorized to be charged to Deposit Account				
	8. Deposit Account No.				
City: <u>Cleveland</u> State: <u>OH</u> Zip: <u>44114-1484</u>	16-0820, Order No. 33152 (Attach duplicate copy of this page if paying by deposit account)				
DO NOT USE THIS SPACE					
9. 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. Michael W. Garvey Name of Person Signing Michael W. Garvey Signature Total number of pages including cover sheet, attachments, and document: 3					

PATENT REEL: 011349 FRAME: 0077

ASSIGNMENT

WHEREAS, new and useful improvements have been made by the undersigned in

WAVEFORM EQUALIZER, MOBILE STATION WIRELESS APPARATUS USING THE SAME, BASE STATION WIRELESS APPARATUS USING THE SAME, AND MOBILE COMMUNICATION SYSTEM USING THE SAME

and are the subject of a patent application prepared for filing in the United States Patent and Trademark Office, and executed by the undersigned on the date(s) indicated below, which application is further identified as Pearne & Gordon LLP Docket No. <u>33152</u>.

WHEREAS,	MATSUSHITA	ELECTRIC	INDUSTF	RIAL CO)., LTI	Ο.	`
a corporation of	Japan		, and	having	a place	of business	at
1006, Kadoma,		Osaka,		Ŭ	-		

hereinafter referred to as "assignee", is desirous of acquiring all right, title, and interest throughout the world in, to, and under said improvements and inventions and patent rights therefor.

NOW, THEREFORE, be it known that, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all right, title, and interest, in the United States and throughout the world, in, to and under said improvements and inventions and all patents, patent applications, patent rights, and inventor's certificates thereof, therefor, and therein, including without limitation said application for patent in the United States, all divisions and continuations thereof, all patents which may be granted thereon, all reissues and extensions thereof, all right to sue for past infringement thereunder, all patents which may be granted for said improvements and inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor, have been and are hereby sold, assigned, transferred, and delivered unto assignee, its successors and assigns; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignee's request any and all applications, affidavits, assignments, and other instruments will be made, executed, and delivered as may be necessary, or desirable to secure for or vest in assignee, its successors or assigns, any improvement, inventions, right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Commissioner of Patents and Trademarks is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignee as owner of the entire right, title, and interest in, to, and under the same, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignee as owner of the entire right, title and interest in, to, and under the same.

The undersigned hereby grants the firm of Pearne & Gordon 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 United States Patent and Trademark Office for recordation of this document.

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PATENT REEL: 011349 FRAME: 0078 IN WITNESS WHEREOF, this assignment has been executed below by the undersigned:

(1) Inventor Name (solo or joint): Kazushi TAKANASHI

Signature:	Kazushi Takanushi					
Today's Date:						
Date I Signed De		November 14, 2000				

Witness:

Witness:

(2)	Inventor Name (joint):
	Signature: Dakeshi' Akiyama
-	Today's Date: <u>November 14, 2000</u>
· .	Date I Signed Declaration:November 14, 2000
	Witness:
	Witness:
(3)	Inventor Name (joint):
	Signature:
	Today's Date:
	Date I Signed Declaration:
	Witness:
	Witness:

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PATENT REEL: 011349 FRAME: 0079

RECORDED: 12/05/2000