RECO:



## 101996340

To the Assistant Commissioner for Patents: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies

Jyhchau Horng Jinyun Zhang Philip Orlik

Additional name(s) of conveying party(ies) attached? []Yes [X]No

3. Nature of Conveyance:

[X]Assignment

[]Merger

[]Security Agreement

[]Change of Name

[] Other

Execution Date(s): 1/12/2002

2. Name and address of receiving party(ies):

Name: Mitsubishi Electric Research

Laboratories, Inc.

Street Address: 201 Broadway

City: Cambridge State: MA Zip: 02139

Additional name(s) and address(es) attached?

[ ]Yes [X]No

4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: February 12, 2002

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? []Yes [X]No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Mitsubishi Electric Research Laboratories, Inc.

Street Address: 201 Broadway

City: Cambridge State: MA Zip: 02139

6. Total number of applications and patents involved: [1]

7. Total fee (37CFR 3.41): \$40.00

[] Enclosed

[X] Authorized to be charged to deposit account

8. Deposit account number: 50-0749

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Statement and signature.

To the best of my knowledge and belief, Wing information is true and correct and any attached copy is a true ginal document.

Andrew J. Curtin

Name of Person Signing

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Total number of pages comprising cover sheet:

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**PATENT** REEL: 012608 FRAME: 0731

## ASSIGNMENT

WHEREAS, we, Jyhchau Horng, Jinyun Zhang and Philip Orlik have made certain inventions or discoveries (or both) set forth in an Application for Letters Patent of the United States of America entitled Signal Circulation for Adaptive Signal Equalization in Digital Communication Systems, the specification of which:

<u>X</u>	was	executed	by us	on	the	date	indicat	ced	below;
	was	filed on	as	App	lica	ation	Serial	No.	;
	was	patented	under	U.S	. Pa	tent	No	on	;

WHEREAS, Mitsubishi Electric Research Laboratories, Inc., a corporation of the State of Delaware, whose address is 201 Broadway, Cambridge, Massachusetts 02139, and who, together with its successors and assigns is hereinafter called "Assignee", is desirous of acquiring the entire right, title, and interest together with the benefits and privileges hereinafter recited;

NOW, THEREFORE, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation;

- Assign, transfer and convey to Assignee the entire right, title and interest together with the benefits and privileges in and to said inventions and discoveries, said Application for Letters Patent or similar forms of protection of the United States of America, and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation and convention applications based in whole or in part upon said inventions or discoveries, or upon said application, and any and all Letters Patent, reissues and extensions of Letters Patent or similar forms of protection granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;
- 2. Authorize Assignee to file patent applications in any or all countries or groups of countries on any or all of said inventions and discoveries in our name or in the name

PLG 10/94 ASSIGNTE.FRM 1

IN WITNESS WHEREOF:	
DATE I SIGNED INVENTOR'S DECLARATION:	
Jyhchau Horng Date:	2/12/02
Witnessed: YUES-PAUL NAKACHE Printed Name	
Mahade.	2/12/02
Signature	Date
Witnessed:	
111	2/12/02
Signature	Date
IN WITNESS WHEREOF:	
DATE I SIGNED INVENTOR'S DECLARATION:	
)~~~ 2	2/12/02
Jinyun Zhang	
Witnessed:Printed Name	
	- /
	2/12/02
Signature	Date
11 11 - 12 - 5	
Witnessed: Huitang Sun	
Printed Name	
	2/12/02
	Date
Signature	Dare-
Ling Li 3	

PATENT REEL: 012608 FRAME: 0733 IN WITNESS WHEREOF:

DATE I SIGNED INVENTOR'S DECLARATION:

Philip Orlik

Witnessed: Daqing Gu
Printed Name

Zirzioz

Signature

Witnessed: ZAFER SAHINOGLU
Printed Name

Signature

02/12/02

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**RECORDED: 02/14/2002**