

MERL-2006

RECORDATION FORM COVER SHEET
PATENTS ONLY

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

1. Name of conveying party(ies):
Zhifeng Tao; Andreas F. Molisch; Philip V. Orlik; Jinyun Zhang; Shigeru Uchida; Kentarou Sawa
Additional name(s) of conveying party(ies) attached? Yes No
3. Nature of Conveyance:
 Assignment Merger
 Security Agreement Change of Name
Execution Dates: June 16, 2008; June 9, 2008; June 16, 2008; June 16, 2008; June 9, 2008; June 9, 2008;

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 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:
A. Patent Application No. (s) 12/117,219
B. Patent No. (s)
Additional numbers attached? Yes 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
 Authorized to be charged to deposit account
8. Deposit account number: 50-0749

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.
Gene V. Vinokur /G.Vinokur, Reg.# 54,513/ June 16, 2008
Name of Person Signing Signature Date
Total number of pages comprising cover sheet: [1]

CH \$40.00 500749 12117219

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ASSIGNMENT

WHEREAS, We (I), have made certain inventions or discoveries (or both) set forth in an Application entitled SIGNALING AND TRAINING FOR ANTENNA SELECTION IN OFDMA NETWORKS, the specification of which:

___ was executed by us on the date indicated below;

X was filed on May 8, 2008 as Application Serial No. 12/117,219;

___ was patented under U.S. Patent 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 I hereby acknowledge, I hereby, without reservation;

1. 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 my name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or any other relevant

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convention or treaty or otherwise;


3. Authorize and request the Assistant Commissioner for Patents of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as Assignee of the entire right, title and interest therein or otherwise as Assignee may direct;

4. Warrant that I have not knowingly conveyed to others any rights in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to Assignee without encumbrance;

5. Bind my heirs, legal representatives and assigns, as well as myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonable serving to assure that said inventions and discoveries, said patent applications and said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us, my heirs, legal representatives and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in my control or in the control of my heirs, legal representatives or assigns which may be useful for establishing any facts of my conceptions, disclosures, and reduction to practice of said inventions or discoveries.

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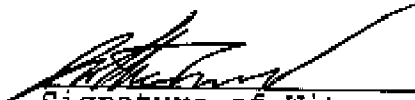
IN WITNESS WHEREOF:

Inventor Signature : 
Zhifeng Tao

Today's Date: 06/16/2008

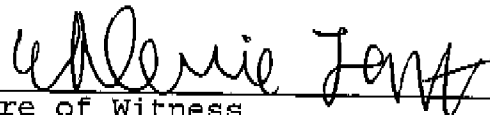
Date Inventor Signed Declaration : April 15, 2008

Witnessed: Jonathan Leonard
Print Witness Name


Signature of Witness

6/16/08
Date

Witnessed: Valerie Lampert
Print Witness Name


Signature of Witness

6/16/08
Date

IN WITNESS WHEREOF;

MERL-2006

Inventor Signature : *Molisch*
Andreas F. Molisch
Today's Date: 06/09/08

Date Inventor Signed Declaration : April 15, 2008

Witnessed: Valerie Lamper
Print Witness Name

Valerie Lamper
Signature of Witness

6/9/08
Date

Witnessed: NEESH MENTA
Print Witness Name

Neesh
Signature of Witness

6/9/08
Date

IN WITNESS WHEREOF:

MERL-2006

Inventor Signature : Philip V. Orlik
Philip V. Orlik
Today's Date: 6/16/08

Date Inventor Signed Declaration : April 25, 2008

Witnessed: N. MENTA
Print Witness Name

Needham
Signature of Witness

6/16/08
Date

Witnessed: Jonathan Leonard
Print Witness Name

[Signature]
Signature of Witness

6/16/08
Date

IN WITNESS WHEREOF:

MERL-2006

Inventor Signature : Jinyun Zhang
Jinyun Zhang

Today's Date: June 16, 2008

Date Inventor Signed Declaration : April 15, 2008

Witnessed: N. MEHTA
Print Witness Name

Neelesh
Signature of Witness

6/16/08
Date

Witnessed: Jonathan Leonard
Print Witness Name

Jonathan Leonard
Signature of Witness

6/16/08
Date

IN WITNESS WHEREOF:

MERL-2006

Inventor Signature : Shigeru Uchida
Shigeru Uchida

Today's Date: June 9, 2008

Date Inventor Signed Declaration : April 26, 2008

Witnessed: Tasuku Kuriyama
Print Witness Name

Tasuku Kuriyama
Signature of Witness

June 9, 2008
Date

Witnessed: Akira Otsuka
Print Witness Name

Akira Otsuka
Signature of Witness

June 9, 2008
Date

IN WITNESS WHEREOF:

MERL-2006

Inventor Signature : Kentarou Sawa
Kentarou Sawa

Today's Date: June 09, 2008

Date Inventor Signed Declaration : April 26, 2008

Witnessed: Akira Otsuka
Print Witness Name

Akira Otsuka
Signature of Witness

June 9, 2008
Date

Witnessed: Tasuku Kuriyama
Print Witness Name

Tasuku Kuriyama
Signature of Witness

June 9, 2008
Date