



## ASSIGNMENT

WHEREAS, I, have made certain inventions or discoveries (or both) set forth in an Application for Letters Patent of the United States of America entitled TRAINING FRAMES FOR MIMO SYSTEMS, the specification of which:

\_\_\_ was executed by us on the date indicated below;

X was filed on May 11, 2005 as Application Serial No. 11/127,006 ;

\_\_\_ 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 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.

IN WITNESS WHEREOF:

Inventor Signature : *Andreas F. Molisch*  
 Andreas F. Molisch

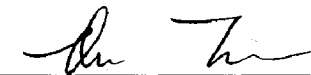
Today's Date: 08/02/05

Date Inventor Signed Declaration : 08/02/05

On this 2<sup>nd</sup> day of August, 2005, before me, the undersigned notary public, personally appeared Andreas F. Molisch (name of document signer), proved to me through satisfactory evidence of identification, which were personal knowledge to be the person whose name is signed on the preceding or attached document in my presence.

*Clifton D. Mueller*  
 (official signature and seal of notary)

IN WITNESS WHEREOF:

Inventor Signature :   
Jianxuan Du

Today's Date: 8/3/2005

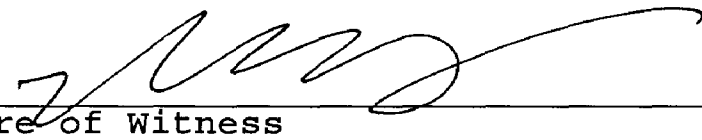
Date Inventor Signed Declaration : 8/3/2005

Witnessed: GUOCONG SONG  
Print Witness Name

  
Signature of Witness

08/03/2005  
Date

Witnessed: ZHENYUN ZHUANG  
Print Witness Name

  
Signature of Witness

Aug. 03. 2005  
Date

IN WITNESS WHEREOF:

Inventor Signature : *Daqing Gu*  
Daqing Gu

Today's Date: 8/5/2005

Date Inventor Signed Declaration : 8/5/2005

On this 5<sup>th</sup> day of August, 2005, before me, the undersigned notary public, personally appeared Daqing Gu (name of document signer), proved to me through satisfactory evidence of identification, which were personal knowledge, to be the person whose name is signed on the preceding or attached document in my presence.

*Clifton D. Mueller*  
(official signature and seal of notary)