

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT						
NATURE OF CONVEYANCE:	ASSIGNMENT						
CONVEYING PARTY DATA							
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Gordon L. Stuber</td> <td>11/27/2002</td> </tr> <tr> <td>Apurva N. Mody</td> <td>11/26/2002</td> </tr> </tbody> </table>		Name	Execution Date	Gordon L. Stuber	11/27/2002	Apurva N. Mody	11/26/2002
Name	Execution Date						
Gordon L. Stuber	11/27/2002						
Apurva N. Mody	11/26/2002						
RECEIVING PARTY DATA							
Name:	Georgia Tech Research Corporation						
Street Address:	505 10th Street, N.W.						
City:	Atlanta						
State/Country:	GEORGIA						
Postal Code:	30332-0415						
PROPERTY NUMBERS Total: 1							
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Patent Number:</td> <td>RE43294</td> </tr> </tbody> </table>		Property Type	Number	Patent Number:	RE43294		
Property Type	Number						
Patent Number:	RE43294						
CORRESPONDENCE DATA							
Fax Number:	6082584258						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
Phone:	6082584292						
Email:	ipdocketing@foley.com						
Correspondent Name:	Paul S. Hunter						
Address Line 1:	Foley & Lardner LLP						
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Address Line 4:	Madison, WISCONSIN 53703						
ATTORNEY DOCKET NUMBER:	088245-6417						
NAME OF SUBMITTER:	Paul S. Hunter						
Total Attachments: 4 source=6417_ASSIGN_INVtoGA_121212#page1.tif source=6417_ASSIGN_INVtoGA_121212#page2.tif source=6417_ASSIGN_INVtoGA_121212#page3.tif source=6417_ASSIGN_INVtoGA_121212#page4.tif							

OP \$40.00 RE43294

**ASSIGNMENT  
OF UTILITY PATENT APPLICATION**

WHEREAS, the following parties:

<b>Name</b>	<b>Address</b>
Gordon L. Stuber	1052 Arbor Trace, Atlanta, GA 30318
Apurva N. Mody	327155 Georgia Tech Station, Atlanta, GA 30332

hereinafter referred to as ASSIGNOR, has/have invented certain new and useful improvements ("invention(s)") as described and set forth in the below-identified utility application for United States Letters Patent entitled:

**APPARATUS AND METHODS FOR PROVIDING EFFICIENT SPACE-TIME  
STRUCTURES FOR PREAMBLES, PILOTS AND DATA FOR MULTI-INPUT, MULTI-  
OUTPUT COMMUNICATIONS SYSTEMS,**

which was:

- executed on even date herewith,
- filed with the United States Patent and Trademark Office (USPTO) on September 17, 2002, and assigned Serial No. 10/245,090, and
- further described in U.S. Provisional application entitled "Efficient Training and Synchronization Sequence Structures for MIMO OFDM," filed with the USPTO on September 17, 2001, and assigned Serial No. 60/322,786.

*Note: Only one of the first two checkboxes will be checked. The third checkbox will be checked, only if appropriate.*

WHEREAS, Georgia Tech Research Corporation, having a place of business at 505 10<sup>th</sup> Street, N.W., Atlanta, Georgia, 30332-0415, hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in and to said invention(s), said utility application, said provisional application, and any U.S. and foreign patents which are related to the same.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by ASSIGNOR, ASSIGNOR has sold, assigned and transferred and does hereby sell, assign and

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transfer unto ASSIGNEE, and ASSIGNEE'S successors and assigns, (a) the entire right, title and interest, for the United States of America, in and to said invention(s), said utility application, and said provisional application and all the rights and privileges in any application and under any and all patents that may be granted in the U.S. for said inventions, including all corresponding provisional, continuation, continuation-in-part, divisional, reissue, and reexamination applications; and (b) the entire right, title and interest in and to said invention(s), said utility application, and said provisional application for all countries foreign to the U.S., including all rights of priority arising from them, and all the rights and privileges under any and all forms of protection, including patents, that may be granted in said countries foreign to the U.S. for them.

ASSIGNOR authorizes ASSIGNEE to make application for such protection in its own name and maintain such protection in any and all countries foreign to the U.S., and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from ASSIGNOR, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

ASSIGNOR hereby consents that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of ASSIGNEE to apply for patent or other form of protection for said inventions, said utility application, or said provisional application and to claim the aforesaid benefit of the right of priority.

ASSIGNOR requests that any and all patents for said inventions be issued to ASSIGNEE in the U.S. and to ASSIGNEE in all countries foreign to the U.S., or to such nominee as ASSIGNEE may designate.

ASSIGNOR covenants and agrees that, when requested, ASSIGNOR shall, without charge to ASSIGNEE but at ASSIGNEE'S expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient in connection with the patent applications, patents, or other forms of protection of said invention(s), and for the defense and protection thereof if challenged in the court of law.

ASSIGNOR authorizes ASSIGNEE or its agents to insert, on ASSIGNOR'S behalf, the filing date and/or serial number above pertaining to the utility application and/or the provisional application, if not known as of the date of execution of this document.

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Gordon L. Stuber

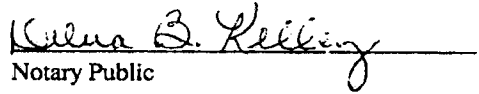
Date: November 27, 2002

United States of America

State of Georgia

County of

On this 27<sup>th</sup> day of November, 2002, before me personally came **Gordon L. Stuber** to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.

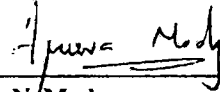


Notary Public

10/11/02  
My Commission Expires (Date)

**PATENT**  
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Apurva N. Mody


Date: Nov. 26, 2002

United States of America

State of Georgia

County of

On this 26th day of November, 2002, before me personally came Apurva N. Mody to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.



\_\_\_\_\_  
Notary Public

Notary Public, Rockdale County, Georgia  
My Commission Expires January 27, 2006

\_\_\_\_\_  
My Commission Expires (Date)

RECORDED: 12/11/2002

PATENT  
REEL: 013568 FRAME: 0497

RECORDED: 12/12/2012

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