FORM PTO-1595

(Rev. 6-93)

01-19-2005

F

102921955

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

OMB No. 0651-0011 (exp. 4/94)	102921	900
To the Commissioner of Patents and Trademarks:	Please record the att	ached original documents or copy thereof.
Name of conveying party(ies):  Georgios B. Giannakis Liuqing Yang Xiliang Luo	Execution Date (Month/Day/Year)  01/05/2005 01/04/2005 01/04/2005	Name and address of receiving party(ies):  Regents of the University of Minnesota 450 McNamara Alumni Center 200 Oak St. SE Minneapolis,MN 55455-2070
Additional name(s) of conveying party(ies) attached?  Yes No		Additional name(s) & address(es) attached?   Yes   No
Nature of conveyance:  Assignment Security Agreement Other:  Merger Change of N	Name	Submission Type:  New Document ID #  Correction of PTO Error: Reel # Frame #  Corrective Document: Reel # Frame #
This document is being filed with a new patent application on  This document is to be recorded against the following patent application or patent:  Patent Application No.(s)  Patent No.(s)  Patent No.(s)		
Patent Application No.(s)		Patent No.(s)
10/952,713	ditional numbers attacl	0 0
Name and address of party to whom corresponde document should be mailed:	nce concerning	Total number of applications and patents involved: 1
Name: Kent J. Sieffert Address: Shumaker & Sieffert, P.A. 8425 Seasons Parkway, Suite 105 St. Paul, MN 55125		Total fee (37 CFR 3.41): \$40.00  Enclosed Authorized to be charged to deposit account  Please charge any additional fees or credit any overpayments to
our Deposit account number: 50-1778		
DO NOT USE THIS SPACE		
Statement and signature:	foregoing informatio	n is true and correct and any attached copy is a true copy of the
original document.	noregoing information	
Kent J. Sieffert  Name of Person Signing Reg. No.: 41,312	gnature	January 11, 2005 Date
Total number of pages of the attached conveyance document including any attachments: 2		
Do not detach this portion		
Mail documents to be recorded with required cover sheet information to:		

Commissioner of Patents and Trademarks Mail Stop Assignments Alexandria, VA 22313-1450

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of information systems, PK2-1000C, Alexandria, VA 22313-1450, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.

01/19/2005 BTOH11 00000019 10952713

01 FC:8021

**PATENT REEL: 016149 FRAME: 0613**  Attorney Docket No.: 1008-024US01

## **ASSIGNMENT**

For valuable consideration, we, Georgios B. Giannakis of 2561 Abbey Hill Dr., Minnetonka, Minnesota 55305, Liuging Yang of 4934 NW 43rd Ave., #105, Gainesville, Florida 32606 and Xiliang Luo of 425 13<sup>th</sup> Avenue SE, Apt. 1701, Minneapolis, Minnesota 55414, hereby assign to: Regents of the University of Minnesota, having a place of business at: 450 McNamara Alumni Center, 200 Oak St. SE, Minneapolis, MN 55455-2070; and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are the subject of an application for United States Patent signed by us, entitled PULSE SHAPER DESIGN FOR ULTRA-WIDEBAND COMMUNICATIONS, filed September 29, 2004, and assigned U.S. Serial Number 10/952,713; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Georgios B. Giannakis

Date: 01/05/05Date: 01/04/05Date: 01/04/05

RECORDED: 01/14/2005

REEL: 016149 FRAME: 0614