## Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:			NEW ASSIGNMENT			
NATURE OF CONVEYANCE:			ASSIGNMENT			
CONVEYING PARTY	DATA					
	Execution Date					
Zukang Shen				02/17/2009		
Tarik Muharemovic				02/17/2009		
Jing Jiang			02/17/2009			
RECEIVING PARTY D	ΑΤΑ					
Name:	Texas Instruments Incorporated					
Street Address:	P.O. Box 655474					
Internal Address:	MS 3999					
City:	Dallas					
State/Country:	TEXAS					
Postal Code:	75265					
PROPERTY NUMBER						
Property Type		Number				
Application Number: 1237		12372	980			
CORRESPONDENCE	DATA					
Fax Number:	(713)93	7-1587				
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.						
Phone: 7139378823						
Email: gerald@lawspatents.com   Correspondent Name: Texas Instruments Incorporated						
Correspondent Name:   Texas Instruments Incorporated     Address Line 1:   P.O. Box 655474						
Address Line 2: MS 3999						
Address Line 4:	Dallas, <sup>-</sup>	TEXAS	75265			
ATTORNEY DOCKET NUMBER:			TI-66001			
NAME OF SUBMITTER:			Gerald E. Laws			
Total Attachments: 1 PATENT						
500785395			REEL: (	022281 FRAME: 0270		

PATENT REEL: 022281 FRAME: 0271

ATTORNEY DOCKET NO.

TI-66001

PAGE 1 OF 1

## ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with a place of business at 7839 Churchill Way, M/S 3999, Dallas, Texas 75251, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner for Patents to issue all patents for said invention, or patent resulting thereform, insofar as my interest is concerned, to the said TEXAS INSTRUMENTS INCORPORATED, as assignee of my entire right, title and interest.

I also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the Paris Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

TITLE OF INVENTION	Mapping between Logical and Physical Uplink Control Resource Blocks in Wireless Networks				
SIGNATURE OF INVENTOR AND NAME	Zukang Shen	Tarik Muharemovic (2)	Jing Jiang		
DATE	02/17/2009	02/17/2009	02/17/2008		
RESIDENCE (City, State)	707 Kindred Lane Richardson, TX 75080 US	7601 Churchill Way, Apt 1726 Dailas, TX 75251 US	1229 Newberry Drive Allen, TX 75013 US		
DATE Declaration signed	02/17/2009	02/17/2009	02/17/208		

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

After recordation, please return Assignment to:

Robert D. Marshall, Jr. Texas Instruments Incorporated P.O. Box 655474, MS 3999 Dailas, TX 75265

**RECORDED: 02/19/2009**