PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT	
NATURE OF CONVEYANCE: ASSIGNMENT				
CONVEYING PART	Y DATA			
		Name	Execution Date	
Eko Onggosanusi			06/29/2010	
Tarik Muharemovic			04/15/2010	
Anthony Ekpenyong	g		04/19/2010	
Zukang Shen			05/18/2010	
RECEIVING PARTY	Ź DATA			
Name:	Texas Instrum	nents Incorporated		
Street Address:	7839 Churchil	l Way		
Internal Address:	M/S 3999			
City:				
State/Country:	TEXAS			
Postal Code: 75251				
PROPERTY NUMBERS Total: 1 Property Type Number				
		12683304	304	
Application Number: 12683304 2 CORRESPONDENCE DATA 2				
Fax Number:(972)917-4418Correspondence will be set via US Mail when the fax attempt is unsuccessful.Phone:9729175290Email:g-sansom@ti.comCorrespondent Name:Texas Instruments IncorporatedAddress Line 1:7839 Churchill WayAddress Line 2:M/S 3999Address Line 4:Dallas, TEXAS 75251				
ATTORNEY DOCKET NUMBER: TI-67543				
NAME OF SUBMITTER: Robert D. Marshall, Jr.				
PATENT PATENT				

501230764

REEL: 024674 FRAME: 0004

Total Attachments: 8 source=TI-67543-Executed-Assignments-All#page1.tif source=TI-67543-Executed-Assignments-All#page2.tif source=TI-67543-Executed-Assignments-All#page3.tif source=TI-67543-Executed-Assignments-All#page4.tif source=TI-67543-Executed-Assignments-All#page5.tif source=TI-67543-Executed-Assignments-All#page6.tif source=TI-67543-Executed-Assignments-All#page7.tif source=TI-67543-Executed-Assignments-All#page8.tif

Page 1

Application No. 12/683,304

Attomey Docket No. 71-97543

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.

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, as well as to U.S. Provisional Application No(s) <u>61/142.774</u>, filed <u>01/06/2009</u>.

NOW. THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged. I hereby sell and assign unto the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in and to the said application(s) and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof, and I hereby authorize and request the Patent and Trademark Office to issue all patents for said invention, or patents resulting therefrom, to the said TEXAS INSTRUMENTS INCORPORATED, as assigned of my entire right, title and interest.

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

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED, or to its successors, ackigns, 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, relissue and substitute applications, make all lawful papers, execute all divisional, continuation, relissue and substitute applications, make all lawful papers, execute all divisional, continuation, relissue and substitute applications, make all lawful papers, execute all divisional, continuation, relissue and substitute applications, make all lawful papers, 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.

I authorize the later insertion of the nonprovisional application number and filing date hereinbalow.

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

TITLE	Predecoding for Joint Processing Coordinated Multi-Point Transmission		ansmission
NONPROVISIONAL APPLICATION NO.	12/683,304	FILING DATE	01/06/2010

SIGNATURE OF INVENTOR	- FFF
PRINTED NAME OF INVENTOR	Eko Onggosanusi
DATE	06/2912010
RESIDENCE (CITY AND STATE)	Allen, TX

Assignment From inventor (US 9/1/09)

PATENT REEL: 024674 FRAME: 0006

Page 2

Application No. 12/683,304

Attorney Docket No. TI-67543

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Tarik Muharemovic
DATE	
RESIDENCE (CITY AND STATE)	Dallas, TX

SIGNATURE OF INVENTOR	
OF INVENTOR	Anthony Ekbonyang
DATE	
RESIDENCE (CITY AND STATE)	Dallas, TX

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Zukang Shen
DATE	
RESIDENCE (CITY AND STATE)	Richardson, TX

After recording, return Assignment to:

Texas instruments incorporated PO Box 655474, M/S 3999 Dailas, TX 75265

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.

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PRINTED NAME OF INVENTOR	Eko Onggosanusi
DATE	
RESIDENCE (CITY AND STATE)	Allen, TX

Attorney Docket No. TI-67543

SIGNATURE OF INVENTOR	Est Ma
PRINTED NAME OF INVENTOR	Tarík Muharemovic
DATE	04/15/2010
RESIDENCE (CITY AND STATE)	Dallas, ⊤X
010X10 T1 100	

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Anthony Ekpenyong
DATE	
RESIDENCE (CITY AND STATE)	Dailas, TX

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Zukang Shen
DATE	
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PRINTED NAME OF INVENTOR	Eko Onggosanusi
DATE	
RESIDENCE (CITY AND STATE)	Allen, TX

Attorney Docket No. TI-67543

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Tarik Muharemovic
DATE	
RESIDENCE (CITY AND STATE)	Dallas, TX
SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Anthony Ekpenyong
DATE	4-19/10
RESIDENCE (CITY AND STATE)	Dailas, TX
SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Zukang Shen
DATE	
RESIDENCE (CITY AND STATE)	Richardson, TX

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Texas Instruments Incorporated PO Box 655474, M/S 3999 Dallas, TX 75265

Assignment From Inventor (US 9/1/09)

PATENT REEL: 024674 FRAME: 0011

ASSIGNMENT

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PRINTED NAME OF INVENTOR	Anthony Ekpenyong
DATE	
RESIDENCE (CITY AND STATE)	Dallas, TX
SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Zukang Shen
DATE	05/18/2210
RESIDENCE	Richardson, TX

After recording, return Assignment to:

(CITY AND STATE)

Texas Instruments Incorporated PO Box 655474, M/S 3999 Dallas, TX 75265

Assignment From Inventor (US 9/1/09)

RECORDED: 07/13/2010

PATENT REEL: 024674 FRAME: 0013