PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Zukang Shen	06/12/2009
Tarik Muharemovic	04/17/2009
Eko N. Onggosanusi	08/17/2009

RECEIVING PARTY DATA

Name:	Texas Instruments Incorporated
Street Address:	7839 Churchill Way
Internal Address:	M/S 3999
City:	Dallas
State/Country:	TEXAS
Postal Code:	75251

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12425612

CORRESPONDENCE DATA

Fax Number: (972)917-4418

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

 Phone:
 (972) 917-5290

 Email:
 uspto@ti.com

Correspondent Name: Texas Instruments Incorporated

Address Line 1: 7839 Churchill Way

Address Line 2: M/S 3999

Address Line 4: Dallas, TEXAS 75251

ATTORNEY DOCKET NUMBER:	TI-66243
NAME OF SUBMITTER:	Robert D. Marshall, Jr.

PATENT REEL: 023110 FRAME: 0838 12425612

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Total Attachments: 3

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> PATENT REEL: 023110 FRAME: 0839

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 of Patents and Trademarks to issue all patents for said invention, or patent resulting therefrom, 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.

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

TITLE OF INVENTION	Transmission of Bundled ACK/NAK Bits
SIGNATURE OF INVENTOR AND NAME	Zukang Shen
DATE	6/12/09
RESIDENCE (CITY AND STATE)	Richardson, TX
DATE APPLICATION EXECUTED	4/17/2009

TITLE OF INVENTION	Transmission of Bundled ACK/NAK Bits
SIGNATURE OF INVENTOR AND NAME	Tarik Muharemovic
DATE	AKAKAMA 4/17/2009
RESIDENCE (CITY AND STATE)	Dallas, TX
DATE APPLICATION EXECUTED	4/17/2009

TITLE OF INVENTION	Transmission of Bundled ACK/NAK Bits
SIGNATURE OF INVENTOR AND NAME	Eko Nugroho Onggosanusi
DATE	
RESIDENCE (CITY AND STATE)	Ailen, TX
DATE APPLICATION EXECUTED	

After recording, return Assignment to:

Robert D. Marshall, Jr. Texas Instruments Incorporated PO Box 655474, M/S 3999 Dallas, TX 75265

> PATENT REEL: 023110 FRAME: 0841

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TITLE OF INVENTION	Transmission of Bundled ACK/NAK Bits
SIGNATURE OF INVENTOR AND NAME	Tarik Muharemovic
DATE	
RESIDENCE (CITY AND STATE)	Dallas, TX
DATE APPLICATION EXECUTED	

TITLE OF INVENTION	Transmission of Bundled ACK/NAK Bits
SIGNATURE OF INVENTOR AND NAME	Eko Nugroho Onggosanusi
DATE	08/17/2009
RESIDENCE (CITY AND STATE)	Allen, TX
DATE APPLICATION EXECUTED	08/17 (2009

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Robert D. Marshall, Jr. Texas Instruments Incorporated PO Box 655474, M/S 3999

Dallas, TX 75265

PATENT REEL: 023110 FRAME: 0842