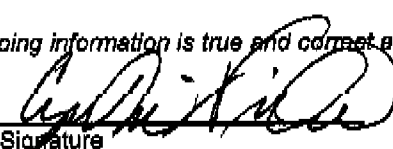


Form POSZ-1585 OMB No. 0951-0027		RECORDATION FORM COVER SHEET PATENTS ONLY	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office Attorney Dkt. No. TI-67615 / 55-052
To the honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.			
1. Name of conveying party(ies): (1): Gaurav AGARWAL (2): John DOWDAL Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		2. Name and address of receiving party(ies) Name: <u>TEXAS INSTRUMENTS INCORPORATED</u> Street Address: <u>7839 Churchill Way, MS 3999</u> <u>Dallas, Texas, 75251, U.S.</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Date(s): <u>(1), (2): August 26, 2009</u>			
4. Application or patent number(s): <input type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) <u>12/548,776</u> Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		B. Patent No.(s)	
5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>Steven A. Shaw</u> Address: <u>Texas Instruments Incorporated</u> <u>P.O. Box 655474, M/S 3999</u> City: <u>Dallas</u> State: <u>TX</u> Zip: <u>75265</u>		6. Total number of applications and patents involved: <input type="checkbox"/> 1 7. Total fee (37 CFR 3.41):\$ <u>40</u> <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account 8. Deposit account number: <u>20-0668</u> (Attach duplicate copy of this page if paying by deposit account)	
DO NOT USE THIS SPACE			
9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> <u>Cynthia K. Nicholson (Reg. No. 36,880)</u>  <u>August 27, 2009</u> Name of Person Signing Signature Date Total number of pages including cover sheet, attachments, and documents: <input checked="" type="checkbox"/> 3			

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Alexandria, VA 22313-1450

CH \$40.00 200668 12548776

ATTORNEY DOCKET NO.

TI-67615 / 55-051

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

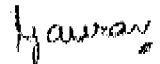
WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, having a place of business at 7839 Churchill Way, MS 3999, Dallas, Texas 75251, P.O. Box 655474, MS 3999, Dallas, Texas 75265, is desirous of acquiring my entire right, title and interest 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 International 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 my hand and seal this day and year;

TITLE OF INVENTION	EXTERNAL MEMORY DATA MANAGEMENT WITH DATA REGROUPING AND CHANNEL LOOK AHEAD		
SIGNATURE OF INVENTOR AND NAME	 GAURAV AGARWAL	John DOWDAL	
DATE	08/26/09		
RESIDENCE (City, State)	Houston, TX	Germantown, MD	
DATE APPLICATION EXECUTED	08/26/09		

After recordation, please return Assignment to:

Steven Shaw
Texas Instruments Incorporated
P.O. Box 655474, M/S 3999
Dallas, TX 75265

ATTORNEY DOCKET NO.

TI-67615 / 55-052

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

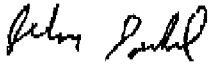
WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, having a place of business at 7839 Churchill Way, MS 3999, Dallas, Texas 75251, P.O. Box 655474, MS 3999, Dallas, Texas 75265, is desirous of acquiring my entire right, title and interest 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 International 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.

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

TITLE OF INVENTION	EXTERNAL MEMORY DATA MANAGEMENT WITH DATA REGROUPING AND CHANNEL LOOK AHEAD		
SIGNATURE OF INVENTOR AND NAME	Gaurav AGARWAL	 John DOWDAL	
DATE		8-26-2009	
RESIDENCE (City, State)	Houston, TX	Germantown, MD	
DATE APPLICATION EXECUTED		8-26-2009	

After recordation, please return Assignment to:

Steven Shaw
Texas Instruments Incorporated
P.O. Box 655474, M/S 3999
Dallas, TX 75265

PATENT

RECORDED: 08/27/2009

REEL: 023153 FRAME: 0279