08-29-2005

TI-38731/1962-27300 U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

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	se record the attached documents or the new address(es) below.			
 Name of conveying party(ies)/Execution Date(s): Charles M. Branch Steven C. Bartling Dharin N. Shah 	2. Name and address of receiving party(ies) Name: Texas Instruments Incorporated Internal Address: MS 3999			
Execution Date(s)	Street Address: P.O. Box 655474			
3. Nature of conveyance:				
Assignment Merger	City: Dallas			
Security Agreement Change of Name	State: Texas			
Government Interest Assignment	(A)			
Executive Order 9424, Confirmatory License	Country: US Zip: 75265			
Other	Additional name(s) & address(es) attached? Yes Vo			
	Additional name(s) & address(es) attached? \(\) Yes \(\) No document is being filed together with a new application.			
A. Patent Application No.(s)	B. Patent No.(s)			
11/171,535 Additional numbers atta				
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:			
Name: Alan Stewart	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40			
Internal Address: Texas Instruments Incorporated	Authorized to be charged by credit card			
MS 3999	✓ Authorized to be charged to deposit account			
Street Address: P.O. Box 655474	Enclosed			
	None required (government interest not affecting title)			
City: Dallas	8. Payment Information			
State: Texas Zip: 75265	a. Credit Card Last 4 Numbers			
Phone Number: (972) 917-5466	11.			
Fax Number: (972) 917-4418	b. Deposit Account Number 20-0668			
Email Address: a-stewart@ti.com	Authorized User Name Alan Stewart			
9. Signature: Who have	August 22, 2005			
Signature	August 23, 2005 2 Date 2			
Jonathan M. Harris	Total number of pages including cover			
Name of Person Signing	sheet, attachments, and documents:			

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

04/26/2005 01 FC:8021

PATENT

REEL: 016912 FRAME: 0467

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 its principal office at 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 and 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 Ass't Commissioner for Patents 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	DIGITAL STORAGE ELEMENT ARCHITECTURE COMPRISING INTEGRATED 4-TO-1 MULTIPLEXER FUNCTIONALITY					
SIGNATURE OF INVENTOR AND NAME	Charles M. Branch	(2) Steven C. Bartling	Dharin N. Shah			
DATE	7/15/2005	7/15/2005				
RESIDENCE (City, County, State)	9208 Middle Glen Drive Dallas, Dallas Texas 75243	2705 Chambers Lane Plano, Collin Texas 75093	02, SnehSarita Aparts; Pushpkunj Soc; Ahmedabad, Gujarat, India 380028			
DATE APPLICATION EXECUTED						

After recordation, please return Assignment to:

Alan Stewart
Texas Instruments Incorporated
P.O. Box 655474, MS 3999
Dallas, TX 75265

PATENT REEL: 016912 FRAME: 0468

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 its principal office at 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 and 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 Ass't Commissioner for Patents 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,

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SIGNATURE OF INVENTOR AND NAME	(1) Charles M. Branch	(2) Steven C. Bartling	Dharin N. Shah				
DATE							
RESIDENCE (City, County, State)	9208 Middle Glen Drive Dallas, Dallas Texas 75243	2705 Chambers Lane Plano, Collin Texas 75093	02, SnehSarita Aparts; Pushpkunj Soc; Ahmedabad, Gujarat, India 380028				
DATE APPLICATION EXECUTED			19/5017/2005				

After recordation, please return Assignment to:

RECORDED: 08/25/2005

Alan Stewart Texas Instruments Incorporated P.O. Box 655474, MS 3999 Dallas, TX 75265

> PATENT REEL: 016912 FRAME: 0469