

CORDATION FORM COVER SHEET PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office

101684383	hed original documents or copy thereof.	
1. Name of conveying party(ies):	2.Name and Address of receiving party(ies):	
1) Keith Balmer (2/6/01) 4) TI-UK (2/6/01)	Name: TEXAS INSTRUMENTS INCORPORATED Address: P.O. Box 655474, MS 3999 City: Dallas State: TX Zip: 75265 Additional name(s) & address(es) attached?Yes _X_No	
2) David Hoyle (3/5/01) 5) TI-US (3/21/01)		
3) Lewis Nardini (2/2/01)		
3. Nature of Conveyance:		
X Assignment Merger	DECEIVED	
Security Agreement Change of Name	MAR 2 6 2001	
Other	MAIL 2 6 2001	
Execution Date: February 2 and 6, March 5 and 21, 2001	The state of the s	
4. Application number(s) or patent number(s).	**************************************	
	The second secon	
This document is being filed together with a new application.	n transfer de la companya de la com La companya de la co	
Execution date of the application: February 2 and 6, March 5,	2001	
Title: Microprocessor With Instructions for Shuffling and	l Dealing Data	
Docket No: TI-26014		
A. Patent Application No.(s) S.N. 09/702,452	B. Patent No.(s) X,XXX,XXX	
Additional numbers attached? YesX_ No	Additional numbers attached?YesXNo	
Name and address of party to whom correspondence concerning document should be mailed:	6. Number of applications and patents involved:(1)	
Name: Gerald E. Laws		
Texas Instruments Incorporated Address: P.O. Box 655474, MS 3999		
City: Dallas State: TX Zip: 75265		
an, n-1904 10000077 900668 19705457	7. Amount of fee enclosed or authorized to be charged: \$40	
20 A 3 (30 CH	8. Deposit Account No: 20-0668 (No duplicate copy is needed).	
DO NOT USE	THIS SPACE	
9. Statement and signature.		
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.	1/-1	
	4415	
March 23, 2001	- Vallar	
Date	Gerald E. Laws, Reg. No. 39,268	
Total Number of Pages Including Cover Sho	eet, Attachments and Document:7	

PATENT

REEL: 011696 FRAME: 0639

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 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	Microprocessor With Instructions for Shuffling and Dealing Data		
SIGNATURE OF INVENTOR	(1)	(2)	X-de n
AND NAME	Keith Balmer	David Hoyle	Lewis Nardini
DATE			2nd Feb 2e
RESIDENCE (City, County, State)	6 Salcombe Close Bedford MK40 3BA UK	5610 W. Blackhawk Dr. Glendale, AZ 85208	8825 Flint Falls Dr. Dallas, TX 75243
DATE APPLICATION EXECUTED			x 01/02/02"

After recordation, please return Assignment to:

Gerald E. Laws
Texas Instruments Incorporated
P.O. Box 655474, MS 3999
Dallas, TX 75265

ASSIGNMENT

DATE:

6th FEBRUARY 2001

PARTIES:

- TEXAS INSTRUMENTS LIMITED (ASSIGNOR) a company organised and existing under the laws of England, with its principal place of business at 800 Pavilion Drive, Brackmills, Northampton, Northamptonshire NN4 7YL, England;
- 2. TEXAS INSTRUMENTS INCORPORATED (ASSIGNEE) a company organised and existing under the laws of the State of Delaware, with its principal place of business at 7839 Churchill Way, Dallas, Texas 75251, United States of America;

RECITALS:

- A. ASSIGNOR is jointly entitled with said ASSIGNEE to the full and exclusive right, title and interest in and to certain inventions for which at least one application for letters patent ("the Application") has been filed as set forth in the Schedule to this Assignment;
- B. **ASSIGNOR** has agreed to assign to the **ASSIGNEE** the full and exclusive right, title and interest in and to the inventions and the Application upon the terms and conditions set forth below;

OPERATIVE PROVISIONS:

In pursuance of an earlier agreement between said **ASSIGNOR** and said **ASSIGNEE**, and in consideration of the sum payable in respect thereof (receipt of which is hereby acknowledged) the **ASSIGNOR** hereby:

- (i) ASSIGNS unto the ASSIGNEE, its successors and assigns, the full and exclusive right, title and interest in and to the inventions, and in and to the Application, and to all letters patents that may issue from the Application or be issued in respect of the inventions, and in and to all divisions, reissues, substitutions, continuations, and extensions of the Application or any application for letters patent filed in respect of said inventions; and the right to file applications for, and obtain letters patent, and to claim priority under the terms of the International Convention for the Protection of Industrial Property or any other relevant convention;
- (ii) authorises and requests that the national authorities of each state issue the Application, and any and all letters patent issued in respect of the inventions, or any and all letters patent resulting from the Application, insofar as Assignor's interest is concerned to the said **ASSIGNEE**, as assignee of the full and exclusive

TI - 26014

- Page 1 of 3 -

right, title and interest in and to the Application and the inventions. **ASSIGNOR** further agrees to execute any and all applications for letters patent, assignments, affidavits, and any other papers in connection therewith necessary to perfect patent rights, and generally to do everything possible to aid said **ASSIGNEE**, its successors, assigns and nominees to obtain and enforce proper patent protection for said inventions in all countries.

SCHEDULE

THE APPLICATION(S)

APPLICATIO NUMBER	DATE FILED	TITLE	
US 09/702,45	2 31 October 2000	Microprocessor with Instructions for Shuffling and Dealing Data	
N WITNES	S WHEREOF this Assignm	nent has been executed as set forth below:	
Executed for	and on behalf of TEXAS IN	STRUMENTS LIMITED	
Ву:	12mili W.M	6/2/01	
Name:	David W. Monk	Date:	
Title:	Managing Director		
Executed for	and on behalf of TEXAS IN	STRUMENTS INCORPORATED	
By:	Food Jenselmalay	March 21, 2001	
	,		

TI - 26014

Title:

- Page 2 of 3 -

Deputy General Patent Counsel & Vice-President

ACKNOWLEDGEMENT

I, Keith BALMER, co-inventors of certain new and useful improvements in the above entitled invention for which an application for letters patent is about to be made, acknowledge that I was an employee of **TEXAS INSTRUMENTS LIMITED** on the date on which said invention was conceived and reduced to practise, that my invention was made in the course of our normal or specifically assigned duties as an employee of **TEXAS INSTRUMENTS LIMITED** and that under English Law our invention and all rights in it belong to **TEXAS INSTRUMENTS LIMITED** by virtue of Section 39 of the Patents Act 1977.

I hereby further agree that I will communicate to **TEXAS INSTRUMENTS LIMITED** or to its successors, assigns and legal representatives, any facts known to me respecting said invention, and at the expense of **TEXAS INSTRUMENTS LIMITED**, will 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 LIMITED**, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, the inventor has hereto set his hand and seal;

Keith BALMER

Date

6 February 2001

TI - 26014

- Page 3 of 3 -

ASSIGNMENT

Whereas, Texas Instruments Limited, (hereinafter TIL), a British company of 800 Pavilion Drive, Northampton Business Park, Northampton NN4 7YL England, and, by operation of English Law, the beneficial owners of all right, title and interest in an invention for which it has filed application in its own name for letters patent in the United Kingdom as 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 7839 Churchill Way, MS 3999, Dallas, Texas 75251, is desirous of acquiring the entire right, title and interest in and to the said invention outside of the United Kingdom, and in and to patent applications filed outside the United Kingdom and any Letters Patent that may issue thereon;

Now, Therefore, for good and valuable consideration, the receipt of which is hereby acknowledged, by this Assignment,

TIL sells and assigns to the said **Texas Instruments Incorporated**, its successors and assigns, the entire right, title and interest in and to the said invention in the U.S.A. and in all other countries outside the United Kingdom and in and to the U.S. patent application identified below and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and the right to file applications and obtain patents in any other country or group of countries, and to claim priority under the terms of the International Convention for the Protection of Industrial Property or any other relevant convention;

TIL hereby authorizes and requests the Commissioner of Patents to issue all U.S. patents for said invention, or patents resulting therefrom, insofar as our interest is concerned to the said **Texas Instruments Incorporated**, as assignee of the entire right, title and interest. **TIL** further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect patent rights, and generally to 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: Microprocessor With Instructions for Shuffling and Dealing Data

Inventor(s): Keith Balmer, David Hoyle, Lewis Nardini

U.S. Application Serial No. 09/702,452, filed on October 31, 2000.

TI-26014 - 1 -

In Witness Whereof this Assignment has been executed as set forth below:

Executed for and on behalf of Texas Instruments Limited
By:
Name:
Title:
Date:
Executed for and behalf of TEXAS INSTRUMENTS INCORPORATED
By:
Name: W. James Brady, III
Title: Deputy General Patent Counsel and Vice President
Date:
ACKNOWLEDGMENT
I,
In Witness Whereof, the or each said inventor has hereto set his hand and seal:
Name: David Hoyle $\frac{3/5/1001}{\text{Date}}$

PATENT REEL: 011696 FRAME: 0645

RECORDED: 03/26/2001