

02-19-2002



FORM PTO-1595

U.S. Department of Commerce  
Patent and Trademark Office

TI-32211

101985579

To the Assistant Commissioner for Patents. Please rebind the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Fernando A. Mujica  
Prakash Easwaran  
Sandeep Kesrimal Oswal

1-28-02

## 2. Name and Address of receiving party(ies):

Name: TEXAS INSTRUMENTS INCORPORATED

Address: P.O. Box 655474, MS 3999

City: Dallas

State: TX Zip: 75265

Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 3. Nature of Conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other

Execution Date: Mujica 09/28/2001; Easwaran 12/17/2001; Oswal 10/02/2001

JAN 28 2002

## 4. Application number(s) or patent number(s).

Execution date of the application: Mujica 09/28/2001; Easwaran 12/17/2001; Oswal 10/02/2001

Title: Hardware Assisted Automatic Gain Control for Digital Subscriber Line Modems

Docket No: TI-32211

A. Patent Application No.(s)

S.N. 09/966,055

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ NoAdditional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: J. Dennis Moore, Reg. No. 28,885  
Texas Instruments Incorporated

Address: P.O. Box 655474, MS 3999

City: Dallas

State: TX Zip: 75265

## 6. Number of applications and patents involved: (1)

## 7. Amount of fee enclosed or authorized to be charged: \$40

## 8. Deposit Account No: 20-0668 (Attach duplicate copy if paying by deposit account)

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.

12/20/2001

Date

J. Dennis Moore, Reg. No. 28,885

Total Number of Pages Including Cover Sheet, Attachments and Document: 4

02/15/01 MILLER 0000001 00066 0966055

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PATENT  
REEL: 012573 FRAME: 0765

## 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

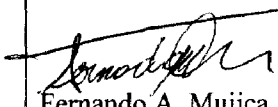
WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with its principal office at 7839 Churchill Way, M.S. 3999, Dallas, TX 75251, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said 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 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 hand and seal this day and year;

TITLE OF INVENTION	HARDWARE ASSISTED AUTOMATIC GAIN CONTROL FOR DIGITAL SUBSCRIBER LINE MODEMS			
SIGNATURE OF INVENTOR AND NAME	1)  Fernando A. Mujica	2)  Prakash Easwaran	3)  Sandeep Kesrimal Oswal	4)
DATE	09/28/2001			
RESIDENCE (City, County, State)	Allen Collin County Texas	Bangalore INDIA	Bangalore INDIA	
DATE APPLICATION EXECUTED	09/28/2001			

After recording return Assignment to:

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

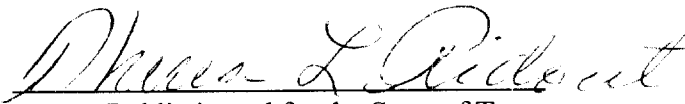
representatives, shall and will do all lawful acts and things, make all rightful oaths, and make, execute and deliver any and all other instruments in writing, and any and all further applications, papers, powers, affidavits, assignments, disclaimers and other documents, which in the opinion of counsel for said COMPANY, its successors and assigns, may be required or necessary in this or in any foreign country more effectually to secure and vest in said COMPANY, its successors and assigns, the entire right, title and interest in and to the Invention(s), and any related application or applications, patents, rights, titles, benefits, privileges, and advantages hereby sold, assigned, confirmed, transferred and conveyed.

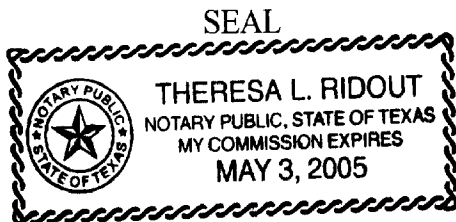
IN WITNESS WHEREOF I, Wayne I. Kanak, Assistant Secretary of Camco International Inc. have hereunto set my hand and seal this 29th day of October, 2001.

  
Wayne I. Kanak, Assistant Secretary  
CAMCO INTERNATIONAL INC.

STATE OF TEXAS           §  
                                     §  
COUNTY OF HARRIS   §

BEFORE ME, this 29th day of October 2001, personally appeared Wayne I. Kanak, to me known to be the person who is described in and who executed the foregoing assignment instrument, and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

  
Notary Public in and for the State of Texas



My Commission Expires: May 3, 2005

# ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as here, 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 7839 Churchill Way, M/S 3999, Dallas, TX 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 in 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 thereon, 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, Thereunto set hand and seal this day and year;

TITLE OF INVENTION	HARDWARE ASSISTED AUTOMATIC GAIN CONTROL FOR DIGITAL SUBSCRIBER LINE MODEMS			
SIGNATURE OF INVENTOR AND NAME	1) Fernando A. Mujica	2)  Prakash Easwaran	3) Sandeep Kesrimal Oswal	4)
DATE		17/DEC/2001		
RESIDENCE (City, County, State)	Allen Collin County Texas	Bangalore INDIA	Bangalore INDIA	
DATE APPLICATION EXECUTED		12/17/2001		

After recording return Assignment to:

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

102521.00167  
2: 3009742v1

Docket No.: 11-12211

# 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

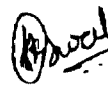
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TITLE OF INVENTION	HARDWARE ASSISTED AUTOMATIC GAIN CONTROL FOR DIGITAL SUBSCRIBER LINE MODEMS			
SIGNATURE OF INVENTOR AND NAME	1)  Fernando A Mujica	2)  Prakash Easwaran	3)  Sandeep Kesrimal Oswal	4)
DATE	10/02/2001			
RESIDENCE (City, County, State)	Allen Collin County Texas	Bangalore INDIA	Bangalore INDIA	
DATE APPLICATION EXECUTED	10/02/2001			

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

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