

01-06-2004

RE



FORM PTO-1595

U.S. Department of Commerce
Patent and Trademark Office

DOCUMENT ID NO.: 102535665

102713164

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

- 1) David J. Love (08/19/2003)
- 2) Srinath Hosur (08/18/2003)
- 3) Anuj Batra (08/15/2003)

9-2003

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: 1) August 19, 2003; 2) August 18, 2003; 3) August 15, 2003

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

This document is being filed together with a new application.

Execution date of the application: 1) August 19, 2003; 2) August 18, 2003; 3) August 15, 2003

Title: *Low-Complexity High Performance Decoder And Method Of Decoding For Communications Systems Using Multidimensional Signaling*

Docket No: TI-35081

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? Yes No

Additional numbers attached? Yes No

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

Name: Wade James Brady
 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

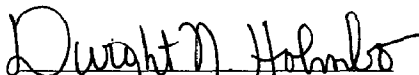
8. Deposit Account No: 20-0668 of Texas Instruments Incorporated

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.

March 31, 2004
Date


 Dwight N. Holmbo, Reg. No. 36,410

08-27-2003



102535665

FORM PTO-1595

U.S. Department of Commerce
Patent and Trademark Office

TI-35081

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

- 1) David J. Love
- 2) Srinath Hosur (08/18/2003)
- 3) Anuj Batra (08/15/2003)

8-20-03

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 _X_ No

3. Nature of Conveyance:

- Assignment
- Merger
- Security Agreement
- Change of Name
- Other _____

Execution Date: 2) August 18, 2003; 3) August 15, 2003

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

This document is being filed together with a new application.

10644546

Execution date of the application: 2) August 18, 2003; 3) August 15, 2003

Title: *Low-Complexity High Performance Decoder And Method Of Decoding For Communications Systems Using Multidimensional Signaling*

Docket No: TI-35081

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ___ Yes _X_ No

Additional numbers attached? ___ Yes _X_ No

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

Name: Wade James Brady
 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 of Texas Instruments Incorporated

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.

August 20, 2003

Date

Dwight N. Holmbo
 Dwight N. Holmbo, Reg. No. 36,410

03942 U.S. PTO
10/644546



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ATTORNEY DOCKET NO.
TI-35081

ASSIGNMENT Page 1 of 1

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, MS 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 therefore, 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 | Low-Complexity High Performance Decoder And Method Of Decoding For Communications Systems Using Multidimensional Signaling | | |
| SIGNATURE OF INVENTOR AND NAME |  David J. Love |  Srinath Hosur |  Anuj Batra |
| DATE | 8-19-03 | | |
| RESIDENCE (City, County, State) | 718 Royal Birkdale Garland, TX 75044 | 8800 Canyonlands Dr. Plano, TX 75025 | 8729 Southwestern Blvd. #1504 Dallas, TX 75026 |
| DATE APPLICATION EXECUTED | 8-19-03 | | |

ATTORNEY DOCKET NO.
TI-35081

ASSIGNMENT Page 1 of 1

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, MS 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 therefore, 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 | Low-Complexity High Performance Decoder And Method Of Decoding For Communications Systems Using Multidimensional Signaling | | |
| SIGNATURE OF INVENTOR AND NAME | David J. Love | <u>H. Srinath</u> Srinath Hosur | <u>Anuj Batra</u> Anuj Batra |
| DATE | | 16 th August, 2003 | 08/15/2003 |
| RESIDENCE (City, County, State) | 718 Royal Birkdale Garland, TX 75044 | 8800 Canyonlands Dr. Plano, TX 75025 | 8729 Southwestern Blvd. #1504 Dallas, TX 75026 75206 AB |
| DATE APPLICATION EXECUTED | | 16 th August, 2003 | 08/15/2003 |

1 WJB



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

MARCH 16, 2004 ✓

PTAS



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TEXAS INSTRUMENTS INCORPORATED
WADE JAMES BRADY
P.O. BOX 655474, MS 3999
DALLAS, TX 75265

T/ 35081

NEW COVER SHEET 4/15/04

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF NON-RECORDATION OF DOCUMENT

DOCUMENT ID NO.: 102535665

THE ENCLOSED DOCUMENT HAS BEEN EXAMINED AND FOUND NON-RECORDABLE BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. THE REASON(S) FOR NON-RECORDATION ARE STATED BELOW. DOCUMENTS BEING RESUBMITTED FOR RECORDATION MUST BE ACCOMPANIED BY A NEW COVER SHEET REFLECTING THE CORRECT INFORMATION TO BE RECORDED AND THE DOCUMENT ID NUMBER REFERENCED ABOVE.

THE ORIGINAL DATE OF FILING OF THIS ASSIGNMENT DOCUMENT WILL BE MAINTAINED IF RESUBMITTED WITH THE APPROPRIATE CORRECTION(S) WITHIN 30 DAYS FROM THE DATE OF THIS NOTICE AS OUTLINED UNDER 37 CFR 3.51. THE RESUBMITTED DOCUMENT MUST INCLUDE A STAMP WITH THE OFFICIAL DATE OF RECEIPT UNDER 37 CFR 3. APPLICANTS MAY USE THE CERTIFIED PROCEDURES UNDER 37 CFR 1.8 OR 1.10 FOR RESUBMISSION OF THE RETURNED PAPERS, IF THEY DESIRE TO HAVE THE BENEFIT OF THE DATE OF DEPOSIT IN THE UNITED STATES POSTAL SERVICE.

SEND DOCUMENTS TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231. IF YOU HAVE ANY QUESTIONS REGARDING THIS NOTICE, YOU MAY CONTACT THE INDIVIDUAL WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723.

- 1. AN EXECUTION DATE IS NEEDED FOR THE FIRST INVENTOR.

MARCUS KIRK, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

RECEIVED
MAR 29 2004
PATENT DEPT

W