

12-28-2001



:ET

DOCKET NUMBER: CR00300M

101926861

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

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

TIMOTHY A. THOMAS  
XIANGYANG ZHUANG  
FREDERICK W. VOOKMKB  
12/14/01Additional name(s) of conveying party(ies)  
attached?☐

Yes

☒

No

## 2. Name and address of receiving party(ies)

Name: Motorola, Inc.Internal Address: Law DepartmentStreet Address: 1303 East Algonquin RoadCity: Schaumburg State: IL Zip: 60196Additional name(s) & address(es)  
attached?☐

Yes

☒

No

11017 U.S. PTO  
10/017731  
12/14/01

## 3. Name of conveyance:

☒

Assignment

☐

Merger

☐

Security Agreement

☐

Change of Name

☐

Other

Execution Date: 12/14/2001

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

If this document is being filed together with a new application, the execution date of the application is 12/14/2001.

A. Patent Application No.(s)

10017731

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No5. Name and address of party to whom correspondence  
concerning document should be mailed:Name: MOTOROLA, INC.

Internal Address:

1303 E. Algonquin Road

Street Address:

City: SchaumburgState: ILZip: 601966. Total number of applications and patents  
involved:

1

## 7. Total fee (37 CFR 3.41)

\$40.00

☐

Enclosed

☒

Authorized to be charged to deposit account

8. Deposit account number: 13-4772

(Attach duplicate copy of this page 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

DANIEL W. JUFFERNBRUCH

Name of Person Signing

Signature

12/14/2001

Date

Total number of pages including cover sheet, attachments, and documents: 4Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments, Washington, D.C. 20231

12/27/2001 6TON11 00000195 134772 10017731

01 FC:581

40.00 CH

PATENT  
REEL: 012388 FRAME: 0316

## PATENT

## ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, **TIMOTHY A. THOMAS, PALATINE, IL; XIANGYANG ZHUANG, HOFFMAN ESTATES, IL and FREDERICK W. VOOK, SCHAUMBURG, IL**, have sold, assigned and transferred, and do hereby sell, assign and transfer, unto MOTOROLA, INC., a corporation of the State of Delaware, having its principal office in Schaumburg, State of Illinois, United States of America, and its successors, assigns, and legal representatives, the entire right, title and interest for the United States of America in and to certain inventions relating to improvements in **METHOD AND SYSTEM FOR ADAPTIVE CHANNEL ESTIMATION TECHNIQUES** (Docket No. **CR00300M**), described, illustrated and claimed in an application for Letters Patent of the United States of America executed by us on the dates indicated by our signatures below, together with the entire right, title and interest in and to the application, and in and to Letters Patent which may be issued upon the application, and upon any division, extension, continuation or reissue thereof.

We hereby also sell, assign and transfer unto MOTOROLA, INC., the entire right, title and interest in and to the invention and in and to applications for Letters Patent therefor in all countries foreign to the United States of America, including all rights under any and all international conventions and treaties in respect of the invention and the applications for Letters Patent in foreign countries, and we further authorize MOTOROLA, INC. to apply for Letters Patent in foreign countries directly in its own name, and to claim priority of the filing date of the application for Letters Patent of the United States of America under the provisions of any and all international conventions and treaties.

We hereby authorize and request the Commissioner of Patents of the United States of America to issue Letters Patent upon the aforesaid application, division, extension, continuation or reissue, to MOTOROLA, INC., for the sole use and benefit of MOTOROLA, INC., its successors, assigns and legal representatives, to the full end of the term for which Letters Patent may be granted, the same as they would have been held and enjoyed by me had this assignment not been made, and we hereby authorize and request the equivalent authorities in foreign countries to issue the patents of their respective countries to MOTOROLA, INC.

We agree that, when requested, we will, without charge to MOTOROLA, INC., but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for the inventions in any and all countries and for vesting title thereto in MOTOROLA, INC., its successors, assigns and legal representatives or nominees.

We covenant with MOTOROLA, INC., its successors, assigns and legal representatives, that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license or other encumbrance.

Timothy A. Thomas  
TIMOTHY A. THOMAS

DATE: 12/14/01

STATE OF )  
 )ss  
COUNTY OF COOK )

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that TIMOTHY A. THOMAS whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the instrument as their free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 14 day of DEC, 2001.

My commission expires:



Karen Kass  
Notary Public Signature  
KAREN KASS  
Printed Name of Notary Public

Xiangyang Zhuang  
XIANGYANG ZHUANG

DATE: 12/14/01

STATE OF IL )  
 )ss  
COUNTY OF COOK )

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that XIANGYANG ZHUANG whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the instrument as their free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 14 day of DEC, 2001.

My commission expires:



Karen Kass  
Notary Public Signature  
KAREN KASS  
Printed Name of Notary Public



FREDERICK W. VOOK

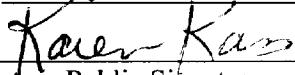
DATE: 12/14/01

STATE OF IL                     )  
   )ss  
 COUNTY OF COOK             )

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that FREDERICK W. VOOK whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the instrument as their free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 14 day of DEC, 2001.

My commission expires:

  
 Notary Public Signature

KAREN KASS  
 Printed Name of Notary Public

