

09-05-2003

IEET

DOCKET NUMBER: CS22428RL



102543398

d original documents or copy thereof.

To the Honorable Commissioner of Patents

1. Name of conveying party(ies):

David B. Cranfill
David S. Brenner
Michael E. Caine

2. Name and address of receiving party(ies)

Name: Motorola, Inc.Internal Address: Law DepartmentAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3 Name of conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ OtherStreet Address: 1303 East Algonquin RoadCity: Schaumburg State: IL Zip: 60196

Execution Date: 8/11/03, 8/13/03, 8/18/03

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

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 8/18/03.

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☐ No

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

Name: MOTOROLA, INC.

Internal Address:

AN472

Street Address:

600 North U.S. Highway 45City: Libertyville6. Total number of applications and patents involved: ☐ 17. Total fee (37 CFR 3.41) \$40.00☐ Enclosed☒ Authorized to be charged to deposit account8. Deposit account number: 502117Deposit account name: Motorola, Inc.

(Attach duplicate copy of this page if paying by deposit account.)

09/04/2003 BYRME IL 00000105 502117 10650643

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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

Randall S. Vaas

Name of Person Signing

Signature

8-28-2003

Date

Total number of pages including cover sheet, attachments, and documents: ☐ 13Mail documents to be recorded with required cover sheet information to:
Mail Stop Patent Application, Commissioner of Patents, P. O. Box 1450, Alexandria, VA 22313-1450

CS22428RL

PATENT
REEL: 014449 FRAME: 0351

PATENT

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, **DAVID B. CRANFILL, SPARTA, NJ; DAVID S. BRENNER, ARLINGTON HEIGHTS, IL; and MICHAEL E. CAINE, NEEDHAM, MA,** 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 **MULTIFUNCTION TRANSDUCER AND METHOD OF DRIVING** (Docket No. **CS22428RL**), 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.

PB
8-18-03

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.

CS22428RL

1

PATENT
REEL: 014449 FRAME: 0352

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.

DATE: _____

DAVID B. CRANFILL

STATE OF NJ)
)ss
COUNTY OF)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that David B. Cranfill 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 _____ day of ___, 2003.

My commission expires:

Notary Public Signature

Printed Name of Notary Public

David S. Brenner
DAVID S. BRENNER

DATE: 8-18-03

STATE OF IL)
)ss
COUNTY OF)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that David S. Brenner 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 18th day of Aug, 2003.

My commission expires: 2/3/2007



Lori Ann Hess
Notary Public Signature
LORI ANN HESS
Printed Name of Notary Public

MICHAEL E. CAINE

DATE: _____

STATE OF MA)
)ss
COUNTY OF)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that Michael E. Caine 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 _____ day of ___, 2003.

My commission expires:

Notary Public Signature

Printed Name of Notary Public

PATENT

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, **DAVID B. CRANFILL, SPARTA, NJ; DAVID S. BRENNER, ARLINGTON HEIGHTS, IL; and MICHAEL E. CAINE, NEEDHAM, MA,** 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 **MULTIFUNCTION TRANSDUCER AND METHOD OF DRIVING** (Docket No. **CS22428RL**), 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.

CS22428RL

1

PATENT
REEL: 014449 FRAME: 0356

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.



DAVID B. CRANFILL

DATE: 8/13/03

STATE OF NJ)
)ss
COUNTY OF)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that David B. Cranfill 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 13 day of August, 2003.

My commission expires:


Notary Public Signature

SUSAN A. LORIG
Printed Name of Notary Public NEW JERSEY
Commission Expires 4/10/2007

6/12/07

CS22428RL

2

PATENT
REEL: 014449 FRAME: 0357

DAVID S. BRENNER

DATE: _____

STATE OF IL)
)ss
COUNTY OF)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that David S. Brenner 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 ____ day of _____, 2003.

My commission expires:

Notary Public Signature

Printed Name of Notary Public

MICHAEL E. CAINE

DATE: _____

STATE OF MA)
)ss
COUNTY OF)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that Michael E. Caine 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 ____ day of _____, 2003.

My commission expires:

Notary Public Signature

Printed Name of Notary Public

PATENT

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, **DAVID B. CRANFILL, SPARTA, NJ; DAVID S. BRENNER, ARLINGTON HEIGHTS , IL; and MICHAEL E. CAINE, NEEDHAM, MA,** 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 **MULTIFUNCTION TRANSDUCER AND METHOD OF DRIVING** (Docket No. **CS22428RL**), 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.

CS22428RL

1

PATENT
REEL: 014449 FRAME: 0360

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.

DATE: _____

DAVID B. CRANFILL

STATE OF NJ)
)ss
COUNTY OF)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that David B. Cranfill 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 ____ day of _____, 2003.

My commission expires:

Notary Public Signature

Printed Name of Notary Public

DAVID S. BRENNER

DATE: _____

STATE OF IL)
)ss
COUNTY OF)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that David S. Brenner 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 ____ day of _____, 2003.

My commission expires:

Notary Public Signature

Printed Name of Notary Public

CS22428RL

3

PATENT
REEL: 014449 FRAME: 0362

Michael E. Caine
MICHAEL E. CAINE

DATE: August 11, 2003

STATE OF MA)
COUNTY OF Norfolk)ss

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that Michael E. Caine 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 11th day of August, 2003.

My commission expires: June 23, 2006

Susan D. Cabana
Notary Public Signature

Susan D. Cabana
Printed Name of Notary Public

CS22428RL

4

RECORDED: 08/28/2003

PATENT
REEL: 014449 FRAME: 0363