

PATENT ASSIGNMENT

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Udar Mittal</td> <td>01/25/2010</td> </tr> <tr> <td>James P Ashley</td> <td>01/25/2010</td> </tr> <tr> <td>Tenkasi Ramabadran</td> <td>01/26/2010</td> </tr> </tbody> </table>		Name	Execution Date	Udar Mittal	01/25/2010	James P Ashley	01/25/2010	Tenkasi Ramabadran	01/26/2010				
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>Motorola</td> </tr> <tr> <td>Street Address:</td> <td>600 North US Hwy 45</td> </tr> <tr> <td>Internal Address:</td> <td>Law Department</td> </tr> <tr> <td>City:</td> <td>Libertyville</td> </tr> <tr> <td>State/Country:</td> <td>ILLINOIS</td> </tr> <tr> <td>Postal Code:</td> <td>60048</td> </tr> </table>		Name:	Motorola	Street Address:	600 North US Hwy 45	Internal Address:	Law Department	City:	Libertyville	State/Country:	ILLINOIS	Postal Code:	60048
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CORRESPONDENCE DATA													
<p>Fax Number: (847)523-2350</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 847 523 2350</p> <p>Email: docketing.libertyville@motorola.com</p> <p>Correspondent Name: Rebecca Check</p> <p>Address Line 1: 600 North US Hwy 45</p> <p>Address Line 2: Law Department</p> <p>Address Line 4: Libertyville, ILLINOIS 60048</p>													
ATTORNEY DOCKET NUMBER:	CS36979AUD_ASSIGN												
NAME OF SUBMITTER:	Philip Premysler												
Total Attachments: 10													

OP \$40.00 12607418

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PATENT

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, **UDAR MITTAL, BANGALORE, INDIA; JAMES P. ASHLEY, NAPERVILLE, IL; AND TENKASI V. RAMABADRAN, NAPERVILLE, 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 entitled **“Method for Combining Non-Integer Length Long Codewords Using Arithmetic Coding”** as described and illustrated in **Motorola Disclosure ID CS36979AUD (58580)** and as described, illustrated in the following:

- 1.) **U.S. Non-Provisional Application No. 12/607418, Confirmation No. 4545** filed on **October 28, 2009** entitled **“Encoder and Decoder Using Arithmetic Stage to Compress Code Space That is Not Fully Utilized”** (Attorney Docket No. **CS36979AUD**),

together with the entire right, title and interest in and to the applications, and in and to Letters Patent which may be issued upon the application(s) or any application(s) claiming priority thereto, and upon any divisions, extensions, continuations, reissues or re-examinations of such applications.

We hereby also sell, assign and transfer unto Assignee, the entire right, title and interest in and to other applications for Letters Patent on the inventions referenced in this Assignment and Agreement, including any applications specifically referenced in this Assignment and Agreement, and all rights, title and interest in and to all applications for Letters Patent in respect of the invention filed under any and all international conventions and treaties together with the entire right, title and interest in and to Letters Patent which may be issued upon the applications, and upon any divisions, extensions, continuations, reissues and/or re-examinations thereof.

We further authorize Assignee to apply for Letters Patent directly in its own name where applicable, and to claim priority of the filing date of the application for

Letters Patent filed under the laws of the applicable country and 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 any Letters Patents upon the aforesaid application(s), divisions, extensions, continuations, reissues or re-examinations, to Assignee, for the sole use and benefit of Assignee, 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 us 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 Assignee.

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

We covenant with Assignee that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license or other encumbrance.

James P. Ashley
James P. Ashley

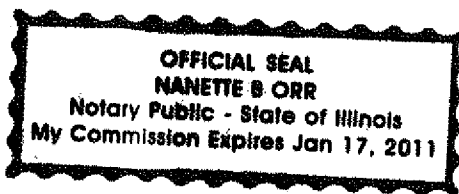
DATE: 1/25/10

STATE OF IL)
COUNTY OF Cook)ss

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that James P. Ashley, 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 25th day of January, 2010.

My commission expires: 01/19/2011



Nanette B. Orr
Notary Public Signature
Nanette B. Orr
Printed Name of Notary Public

Tenkasi V. Ramabadran
Tenkasi V. Ramabadran

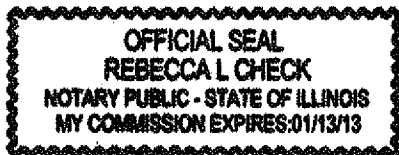
DATE: Jan 26, 2010

STATE OF IL)
COUNTY OF Lake)ss

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that Tenkasi V. Ramabadran, 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 26th day of January, 2010.

My commission expires:



Rebecca L. Check
Notary Public Signature

REBECCA L. CHECK
Printed Name of Notary Public

-OR-

1st Witness Signature Date

1st Witness Printed Name

-AND-

2nd Witness Signature Date

2nd Witness Printed Name

PATENT

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, **UDAR MITTAL, BANGALORE, INDIA; JAMES P. ASHLEY, NAPERVILLE, IL; AND TENKASI V. RAMABADRAN, NAPERVILLE, 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 entitled **"Method for Combining Non-Integer Length Long Codewords Using Arithmetic Coding"** as described and illustrated in **Motorola Disclosure ID CS36979AUD (58580)** and as described, illustrated in the following:

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together with the entire right, title and interest in and to the applications, and in and to Letters Patent which may be issued upon the application(s) or any application(s) claiming priority thereto, and upon any divisions, extensions, continuations, reissues or re-examinations of such applications.

We hereby also sell, assign and transfer unto Assignee, the entire right, title and interest in and to other applications for Letters Patent on the inventions referenced in this Assignment and Agreement, including any applications specifically referenced in this Assignment and Agreement, and all rights, title and interest in and to all applications for Letters Patent in respect of the invention filed under any and all international conventions and treaties together with the entire right, title and interest in and to Letters Patent which may be issued upon the applications, and upon any divisions, extensions, continuations, reissues and/or re-examinations thereof.

We further authorize Assignee to apply for Letters Patent directly in its own name where applicable, and to claim priority of the filing date of the application for

Letters Patent filed under the laws of the applicable country and 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 any Letters Patents upon the aforesaid application(s), divisions, extensions, continuations, reissues or re-examinations, to Assignee, for the sole use and benefit of Assignee, 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 us 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 Assignee.

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

We covenant with Assignee that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license or other encumbrance.

Printed

DATE: 25-Jan. 2010

Udar Mittal

STATE OF)
COUNTY OF)ss
)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that Udar Mittal, 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 _____, 2010.

My commission expires:

Notary Public Signature


Printed Name of Notary Public

-OR-

Pawan Mathur 25 Jan. 2010
1st Witness Signature Date

PAWAN MATHUR
1st Witness Printed Name

-AND-

 25 Jan. 2010
2nd Witness Signature Date

VIKRANT OAK
2nd Witness Printed Name

James P. Ashley

DATE: _____

STATE OF IL)
)ss
COUNTY OF)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that James P. Ashley, 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 _____, 2010.

My commission expires:

Notary Public Signature

Printed Name of Notary Public

-OR-

1st Witness Signature _____ Date _____

1ST Witness Printed Name

-AND-

2ND Witness Signature _____ Date _____

2ND Witness Printed Name _____

Tenkasi V. Ramabadran

DATE: _____

STATE OF IL)
)ss
COUNTY OF)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that Tenkasi V. Ramabadran, 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 _____, 2010.

My commission expires:

Notary Public Signature

Printed Name of Notary Public

-OR-

1st Witness Signature _____ Date _____

1ST Witness Printed Name

-AND-

2ND Witness Signature _____ Date _____

2ND Witness Printed Name