

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT2917110

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
James P. Ashley	01/25/2010
Udar Mittal	01/25/2010
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MOTOROLA, INC.
<b>Street Address:</b>	600 NORTH US HWY 45
<b>Internal Address:</b>	LAW DEPARTMENT
<b>City:</b>	LIBERTYVILLE
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	60048
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	13481608
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(877)769-7945
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	(202) 783-5070
<b>Email:</b>	apsi@fr.com
<b>Correspondent Name:</b>	SAM L. WILLIAMS
<b>Address Line 1:</b>	FISH & RICHARDSON P.C.
<b>Address Line 2:</b>	P.O.BOX 1022
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55440-1022
<b>ATTORNEY DOCKET NUMBER:</b>	16113-6285002
<b>NAME OF SUBMITTER:</b>	LORI L. STEWART
<b>SIGNATURE:</b>	/Lori L. Stewart/
<b>DATE SIGNED:</b>	06/27/2014
<b>Total Attachments: 8</b>	
source=Assignment #1#page1.tif	
source=Assignment #1#page2.tif	
source=Assignment #1#page3.tif	
source=Assignment #1#page4.tif	
<b>PATENT</b>	

source=Assignment #1#page5.tif

source=Assignment #1#page6.tif

source=Assignment #1#page7.tif

source=Assignment #1#page8.tif

## ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, **JAMES P. ASHLEY, NAPERVILLE, IL; AND UDAR MITTAL, BANGALORE, INDIA;** 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 CS37234AUD (59488)** and as described, illustrated in the following:

- 1.) **U.S. Non-Provisional Application No. 12/607,439, Confirmation No. 4580** filed on **October 28, 2009** entitled "**Encoder that Optimizes Bit Allocation for Information Sub-Parts**" (**Attorney Docket No. CS37234AUD**),

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

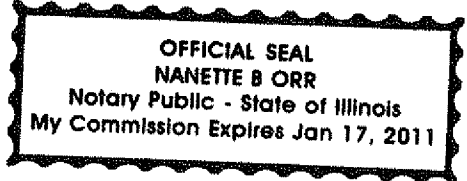
STATE OF IL )  
COUNTY OF Cook )ss

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: 01/17/2011

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





PATENT

## ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, **JAMES P. ASHLEY, NAPERVILLE, IL; AND UDAR MITTAL, BANGALORE, INDIA;** 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 CS37234AUD (59488)** and as described, illustrated in the following:

- 1.) **U.S. Non-Provisional Application No. 12/607,439, Confirmation No. 4580** filed on **October 28, 2009** entitled "**Encoder that Optimizes Bit Allocation for Information Sub-Parts**" (**Attorney Docket No. CS37234AUD**),

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.



DATE: \_\_\_\_\_

James P. Ashley

STATE OF IL )  
COUNTY OF )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 \_\_\_\_\_ day of \_\_\_\_\_, 2010.

My commission expires:

\_\_\_\_\_  
Notary Public Signature

\_\_\_\_\_  
Printed Name of Notary Public

-OR-

\_\_\_\_\_  
1<sup>ST</sup> Witness Signature Date

\_\_\_\_\_  
1<sup>ST</sup> Witness Printed Name

-AND-

\_\_\_\_\_  
2<sup>ND</sup> Witness Signature Date

\_\_\_\_\_  
2<sup>ND</sup> Witness Printed Name

*Udar Mittal*  
Udar Mittal

DATE: 25 Jan, 2010

STATE OF \_\_\_\_\_ )  
                                          )ss  
COUNTY OF \_\_\_\_\_ )

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  
1<sup>ST</sup> Witness Signature      Date

PAWAN MATHUR  
1<sup>ST</sup> Witness Printed Name

-AND-

*Vikrant Oak*      25 Jan, 2010  
2<sup>ND</sup> Witness Signature      Date

VIKRANT OAK  
2<sup>ND</sup> Witness Printed Name