PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Vijay Nangia	03/30/2009
Robert T Love	03/30/2009
Ravikiran Nory	03/31/2009

RECEIVING PARTY DATA

Name:	Motorola, Inc.	
Street Address:	1303 E. Algonquin Road	
Internal Address:	IL01-3rd Floor	
City:	Schaumburg	
State/Country:	ILLINOIS	
Postal Code:	60196	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12410449

CORRESPONDENCE DATA

Fax Number: (847)523-2350

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 847-523-2350

Email: docketing.libertyville@motorola.com

Correspondent Name: Motorola. Inc.

Address Line 1: 600 North U.S. Highway 45
Address Line 4: Libertyville, ILLINOIS 60048

ATTORNEY DOCKET NUMBER: CS36747

NAME OF SUBMITTER: Becky Check

Total Attachments: 5

500828962

source=CS36747_ASSIGN#page1.tif

PATENT REEL: 022515 FRAME: 0166 **\$40.00 124104**

CH \$40.00

source=CS36747_ASSIGN#page2.tif source=CS36747_ASSIGN#page3.tif source=CS36747_ASSIGN#page4.tif source=CS36747_ASSIGN#page5.tif

> PATENT REEL: 022515 FRAME: 0167

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, VIJAY NANGIA, ALGONQUIN, IL; ROBERT T LOVE, BARRINGTON, IL; AND RAVIKIRAN NORY, PALATINE, 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 "PHICH Resource Signaling in a Wireless Communication System" as described, illustrated in Motorola Disclosure ID. CS36747 (57721) and as described, illustrated and claimed in the following:

1.) U.S. Non-Provisional Application No. 12/410,449, Confirmation No. 3224 filed on March 24, 2009 entitled "PHICH Resource Signaling in a Wireless Communication System" (Attorney Docket No. CS36747 (57721)).

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 applications, and upon any divisions, extensions, continuations, reissues or re-examinations 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 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 any Letters Patents upon the aforesaid application, divisions, extensions, continuations, reissues or re-examinations, to MOTOROLA, INC., for the sole use and benefit of MOTOROLA, INC., its successors, assigns and legal

Page 1 of 5

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.

Vijoy Nangia	DATE: March 30, 2009	
Vijay Nångia		
STATE OF IL) COUNTY OF LAKE)		
The undersigned Notary Public in and certify that Vijay Nangia, whose name appeared before me this day in person a delivered the instrument as their free a purposes therein set forth.	is subscribed to the foregoing ins nd acknowledged that they signed, se nd voluntary act and deed for the ι	strument, aled and
Given under my hand and notarial sea	al this <u>30th</u> day of <u>March</u> ,	2009.
My commission expires: "OFFICIAL SEAL" SUSAN M. FIDLOW NOTARY PUBLIC, STATE OF ILUNOIS My Commission Expires 10/14/2012	Motary Public Signature Susan M. Gd Printed Name of Notary Public	1000
-OR-	1 ST WITNESS SIGNATURE	DATE
	1 ST WITNESS PRINTED NAME	
-AND-	2 ND WITNESS SIGNATURE	DATE
	2 ^{NU} WITNESS PRINTED NAME	v

Robert T Love	DATE: 30 Mar 2009
STATE OF IL) COUNTY OF Jalee)	
certify that Robert T Love, whose name appeared before me this day in person and delivered the instrument as their free an purposes therein set forth.	for the County and State aforesaid, do hereby is subscribed to the foregoing instrument, and acknowledged that they signed, sealed and and voluntary act and deed for the uses and
Given under my hand and notarial seal	this <u>3044</u> day of <u>Mas.da</u> , 2009.
My commission expires: "OFFICIAL SEAL" SUSAN M. FIDLOW NOTARY PUBLIC, STATE OF ILLINOIS My Commission Expires 10/14/2012	Notary Public Signature Susan M. Fidlow Printed Name of Notary Public
-OR-	1 ST WITNESS SIGNATURE DATE
	1 ST WITNESS PRINTED NAME
-AND-	
	2 ^{NU} WITNESS SIGNATURE DATE
	2 ND WITNESS PRINTED NAME

Serain of.	DATE: 31-MARCH -2009
Ravikiran Nory	DATE.
STATE OF IL) COUNTY OF Lake)	
certify that Ravikiran Nory, whose na appeared before me this day in person delivered the instrument as their free purposes therein set forth.	d for the County and State aforesaid, do hereby me is subscribed to the foregoing instrument, and acknowledged that they signed, sealed and and voluntary act and deed for the uses and
Given under my hand and notarial se	eal this $\frac{3/st}{}$ day of $\frac{2009}{}$.
My commission expires:	Notary Public Signature
"OFFICIAL SEAL" SUSAN M. FIDLOW NOTARY PUBLIC, STATE OF ILLINOIS My Commission Expires 10/14/2012	Printed Name of Notary Public
-OR-	181 WITNESS SIGNATURE DATE
	1 ST WITNESS PRINTED NAME
-AND-	2 ND WITNESS SIGNATURE DATE
	2 ND WITNESS PRINTED NAME