504569226 09/27/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4615936

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
RAVIKIRAN NORY	06/26/2017
HOSSEIN BAGHERI	09/27/2017
VIJAY NANGIA	09/27/2017

# **RECEIVING PARTY DATA**

Name:	MOTOROLA MOBILITY LLC
Street Address:	222 WEST MERCHANDISE MART PLAZA, SUITE 1800
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60654

# **PROPERTY NUMBERS Total: 2**

Property Type	Number
Application Number:	15717906
Application Number:	62402719

# **CORRESPONDENCE DATA**

Fax Number: (866)369-7391

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.

Phone: 616 797 1000

Email: mloppnow@watson-ip.com

**Correspondent Name:** THE WATSON INTELLECTUAL PROPERTY GROUP,

Address Line 1: 3133 HIGHLAND DRIVE, SUITE 200 Address Line 4: HUDSONVILLE, MICHIGAN 49426

ATTORNEY DOCKET NUMBER:	MM02157-US-NP	
NAME OF SUBMITTER:	MATTHEW C. LOPPNOW	
SIGNATURE:	/Matthew C. Loppnow/	
DATE SIGNED:	09/27/2017	

## **Total Attachments: 6**

source=MM02157-US-NP-ASSIGNMENT\_nory#page1.tif source=MM02157-US-NP-ASSIGNMENT nory#page2.tif source=MM02157-US-NP-ASSIGNMENT-Hossein#page1.tif

**PATENT REEL: 043720 FRAME: 0386** 504569226

source=MM02157-US-NP-ASSIGNMENT-Hossein#page2.tif source=MM02157-US-NP-ASSIGNMENT-SIGNED-NANGIA#page1.tif source=MM02157-US-NP-ASSIGNMENT-SIGNED-NANGIA#page2.tif

> PATENT REEL: 043720 FRAME: 0387

#### ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, Hossein Bagheri, Urbana IL; Ravikiran Nory, Buffalo Grove, IL; and Vijay Nangia, Woodridge, IL; have sold, assigned and transferred, and do hereby sell, assign and transfer, unto MOTOROLA MOBILITY LLC, a Limited Liability Company of the State of Delaware, having its principal office in Chicago, 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 described, illustrated and claimed in the following applications:

- 1. U.S. Application filed herein and entitled: "METHOD AND APPARATUS FOR REPORTING CHANNEL STATE INFORMATION"; and
- 2. U.S. Provisional Application No. 62/402,719, filed on September 30, 2016 entitled "METHOD AND APPARATUS FOR REPORTING CHANNEL STATE INFORMATION WITH REDUCED LATENCY".

I hereby also sell, assign and transfer unto Assignee, 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 I further authorize Assignee 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.

I 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, 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 application(s) or any application(s) otherwise claiming priority thereto, and upon any divisions, extensions, continuations, reissues and/or reexaminations of such application(s).

I 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

Page 1 of 2

Patent filed under the laws of the applicable country and under the provisions of any and all international conventions and treaties.

I hereby authorize Assignee to 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 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 me had this assignment not been made, and I hereby authorize Assignee to request the equivalent authorities in foreign countries to issue the patents of their respective countries to Assignee.

I agree that, when requested, I 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.

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

(1) Legal Name of Inventor: Hossein Bagheri	
Signature:	Date:
(2) Legal Name of Inventor: Ravikiran Nory	
Signature:	Date: 15 - SEP - 201
(3) Legal Name of Inventor: Vijay Nangia	
Signature:	Date:

### ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, Hossein Bagheri, Urbana IL; Ravikiran Nory, Buffalo Grove, IL; and Vijay Nangia, Woodridge, IL; have sold, assigned and transferred, and do hereby sell, assign and transfer, unto MOTOROLA MOBILITY LLC, a Limited Liability Company of the State of Delaware, having its principal office in Chicago, 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 described, illustrated and claimed in the following applications:

- 1. U.S. Application filed herein and entitled: "METHOD AND APPARATUS FOR REPORTING CHANNEL STATE INFORMATION"; and
- 2. U.S. Provisional Application No. **62/402,719**, filed on **September 30, 2016** entitled "METHOD AND APPARATUS FOR REPORTING CHANNEL STATE INFORMATION WITH REDUCED LATENCY".

I hereby also sell, assign and transfer unto Assignee, 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 I further authorize Assignee 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.

I 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, 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 application(s) or any application(s) otherwise claiming priority thereto, and upon any divisions, extensions, continuations, reissues and/or reexaminations of such application(s).

I 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

Page 1 of 2

Patent filed under the laws of the applicable country and under the provisions of any and all international conventions and treaties.

I hereby authorize Assignee to 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 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 me had this assignment not been made, and I hereby authorize Assignee to request the equivalent authorities in foreign countries to issue the patents of their respective countries to Assignee.

I agree that, when requested, I 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.

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

(1) Legal Name of Inventor: Hossein Bagheri

Signature:	Date:September 27, 2017
(2) Legal Name of Inventor: <b>Ravikiran Nory</b>	
Signature:	Date:
(3) Legal Name of Inventor: <b>Vijay Nangia</b>	
Signature:	Date:

### ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, Hossein Bagheri, Urbana IL; Ravikiran Nory, Buffalo Grove, IL; and Vijay Nangia, Woodridge, IL; have sold, assigned and transferred, and do hereby sell, assign and transfer, unto MOTOROLA MOBILITY LLC, a Limited Liability Company of the State of Delaware, having its principal office in Chicago, 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 described, illustrated and claimed in the following applications:

- 1. U.S. Application filed herein and entitled: "METHOD AND APPARATUS FOR REPORTING CHANNEL STATE INFORMATION"; and
- 2. U.S. Provisional Application No. **62/402,719**, filed on **September 30, 2016** entitled "METHOD AND APPARATUS FOR REPORTING CHANNEL STATE INFORMATION WITH REDUCED LATENCY".

I hereby also sell, assign and transfer unto Assignee, 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 I further authorize Assignee 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.

I 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, 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 application(s) or any application(s) otherwise claiming priority thereto, and upon any divisions, extensions, continuations, reissues and/or reexaminations of such application(s).

I 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

Page 1 of 2

Patent filed under the laws of the applicable country and under the provisions of any and all international conventions and treaties.

I hereby authorize Assignee to 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 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 me had this assignment not been made, and I hereby authorize Assignee to request the equivalent authorities in foreign countries to issue the patents of their respective countries to Assignee.

I agree that, when requested, I 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.

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

Signature:		l) Legal Name of Inventor: Hossein Bagheri					(1) L		
(2) Legal Name of Inventor: Ravikiran Nory  Signature:									
Signature: Date:			Oate:	·				gnature:	S
Signature: Date:									
Signature: Date:									
(3) Legal Name of Inventor: <b>Vijay Nangia</b>					y	vikiran Noi	Inventor: Ra	egal Name of In	(2) L
(3) Legal Name of Inventor: <b>Vijay Nangia</b>									
(3) Legal Name of Inventor: <b>Vijay Nangia</b>							•		
			Date:					gnature:	S
		. *				ay Nangia	Inventor: Vij	egal Name of In	(3) I
Signature: Vý ay Narie Date: 9/27/1	<u>)</u>	9/27/1	Date:		·	~èra	gayNo	gnature: Vq	S

Page 2 of 2