PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2990588

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ADRIAN M SCHUSTER	08/07/2014
KEVIN J BASTYR	08/07/2014
PRABHU ANNABATHULA	08/12/2014
ANDREW K WELLS	08/20/2014
WEN HAO ZHANG	08/18/2014

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14464789

CORRESPONDENCE DATA

Fax Number: (312)291-4033

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: 2242402794

Email: docketing.mobility@motorola.com

MOTOROLA MOBILITY LLC **Correspondent Name:**

222 WEST MERCHANDISE MART PLAZA Address Line 1:

Address Line 2: **SUITE 1800**

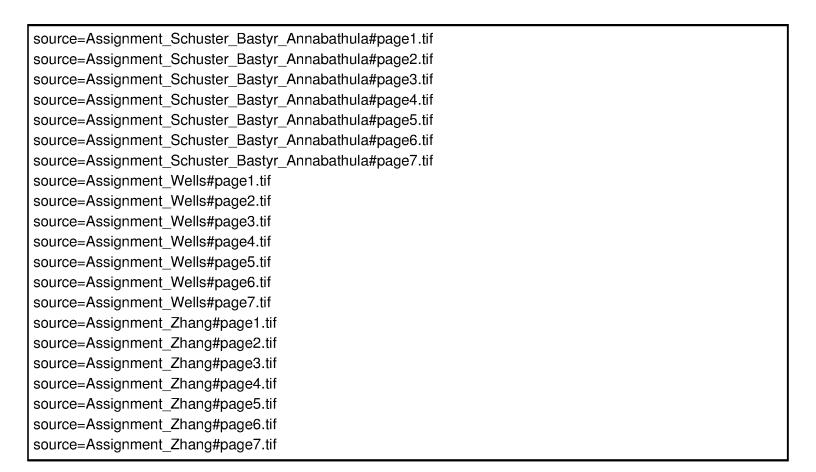
Address Line 4: CHCIAGO, ILLINOIS 60654

ATTORNEY DOCKET NUMBER:	CS42009
NAME OF SUBMITTER:	DENICE KRUEGER
SIGNATURE:	/Denice Krueger/
DATE SIGNED:	08/21/2014

Total Attachments: 21

REEL: 033579 FRAME: 0403 502943990

PATENT



ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, ADRIAN M. SCHUSTER, WEST OLIVE, MICHIGAN; KEVIN J. BASTYR, MILWAUKEE, WISCONSIN; PRABHU ANNABATHULA, GURNEE, ILLINOIS; ANDREW K. WELLS, LINDENHURST, ILLINOIS; and WEN HAO ZHANG, LAKE VILLA, ILLINOIS 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 Libertyville, 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 "Speaker Equalization Based on Sensor Positional Information" as described, illustrated in Disclosure ID (66190) CS42009 and as described, illustrated and claimed in the following applications:

U.S. Application filed herein and entitled: "Systems and Methods for Equalizing Audio for Playback on an Electronic Device"

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 re-examinations 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 7

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.

Ali-M Selfs ADRIAN M. SCHUSTER	DATE:	8/7/2014
STATE OF ILLINOIS) COUNTY OF COOK)		•
The undersigned Notary Public in and for certify that ADRIAN M. SCHUSTER whose instrument, appeared before me this day in sealed and delivered the instrument as the uses and purposes therein set forth. Given under my hand and notarial seal	name is sul person and ir free and vo	acknowledged that they signed, pluntary act and deed for the
My commission expires: OFFICIAL SEAL DENICE KRUEGER Notary Public - State of Illinois My Commission Expires Aug 23, 2015 OR:	Nota	y Public Signature enuce yvecer ed Name of Notary Public
Witness One		
Witness One Signature		Date
Printed Name of Witness One		
Witness Two		
Witness Two Signature		Date
Printed Name of Witness Two		

CS42009
DATE: 8-7-14
STATE OF ILLINOIS)
COUNTY OF Cook)
The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that KEVIN J. BASTYR 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, 2014.
My commission expires: OFFICIAL SEAL DENICE KRUEGER Notary Public - State of Illinois My Commission Expires Aug 23, 2015 My Commission Expires Aug 23, 2015
Witness One
Witness One Signature Date
Printed Name of Witness One
Witness Two
Witness Two Signature Date

Printed Name of Witness Two

PRABHU ANNABATHULA	DATE:	08/12/2014
STATE OF ILLINOIS)		
COUNTY OF COOK		-
The undersigned Notary Public in and certify that PRABHU ANNABATHULA wh instrument, appeared before me this day sealed and delivered the instrument as thuses and purposes therein set forth.	ose name is in person and eir free and v	subscribed to the foregoing dacknowledged that they signed, coluntary act and deed for the
Given under my hand and notarial sea	al this A^{W}	day of <u>Hugust</u> , 2014.
My commission expires: OFFICIAL SEAL DENICE KRUEGER Notary Public - State of Illinois My Commission Expires Aug 23, 2015 OR:		iry Public Signature Peri ce rueger ed Name of Notary Public
Witness One		
Witness One Signature		Date
Printed Name of Witness One		
Witness Two		
Witness Two Signature		Date
Printed Name of Witness Two		

ANDREW K. WELLS	= :
STATE OF ILLINOIS))ss COUNTY OF)	
The undersigned Notary Public in and for the Coertify that ANDREW K. WELLS whose name is appeared before me this day in person and acknowledged the instrument as their free and voluntation purposes therein set forth.	subscribed to the foregoing instrument, owledged that they signed, sealed and ary act and deed for the uses and
Given under my hand and notarial seal this _	, day of, 2014.
My commission expires:	Notary Public Signature
OR:	Printed Name of Notary Public
Witness One	
Witness One Signature	Date
Printed Name of Witness One	<u> </u>
Witness Two	
Witness Two Signature	Date
Printed Name of Witness Two	·

DATE		
WEN HAO ZHANG		•
STATE OF ILLINOIS))ss COUNTY OF)		
The undersigned Notary Public in and for the Coertify that WEN HAO ZHANG whose name is suappeared before me this day in person and acknowledged the instrument as their free and volunta purposes therein set forth.	bscribed to the foregoing owledged that they signed	instrument, d, sealed and
Given under my hand and notarial seal this	day of	, 2014.
My commission expires:	Notary Public Signature	
OR:	Printed Name of Notary Pub	lic
Witness One	·	
Witness One Signature	 Date	• • • •
Printed Name of Witness One		
Witness Two		
Witness Two Signature	Date	
Printed Name of Witness Two	· · · · · · · · · · · · · · · · · · ·	

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, ADRIAN M. SCHUSTER, WEST OLIVE, MICHIGAN; KEVIN J. BASTYR, MILWAUKEE, WISCONSIN; PRABHU ANNABATHULA, GURNEE, ILLINOIS; ANDREW K. WELLS, LINDENHURST, ILLINOIS; and WEN HAO ZHANG, LAKE VILLA, ILLINOIS 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 Libertyville, 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 "Speaker Equalization Based on Sensor Positional Information" as described, illustrated in Disclosure ID (66190) CS42009 and as described, illustrated and claimed in the following applications:

U.S. Application filed herein and entitled: "Systems and Methods for Equalizing Audio for Playback on an Electronic Device"

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 re-examinations 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 7

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.

Page 2 of 7

DATE	<u> </u>
ADRIAN M. SCHUSTER	
STATE OF ILLINOIS))ss COUNTY OF)	
The undersigned Notary Public in and for the Coertify that ADRIAN M. SCHUSTER whose name instrument, appeared before me this day in person sealed and delivered the instrument as their free uses and purposes therein set forth.	e is subscribed to the foregoing on and acknowledged that they signed, and voluntary act and deed for the
Given under my hand and notarial seal this	day of, 2014.
My commission expires:	Notary Public Signature
	Printed Name of Notary Public
OR:	
Witness One	
Witness One Signature	Date
Printed Name of Witness One	
Witness Two	
Witness Two Signature	Date
Printed Name of Witness Two	<u></u>

DATE		
KEVIN J. BASTYR		
STATE OF ILLINOIS))ss COUNTY OF)		
The undersigned Notary Public in and for the Coertify that KEVIN J. BASTYR whose name is sulappeared before me this day in person and acknowled delivered the instrument as their free and volunta purposes therein set forth.	bscribed to the foregoing owledged that they signed	instrument, d, sealed and
Given under my hand and notarial seal this	day of	, 2014.
My commission expires:	Notary Public Signature	
OR:	Printed Name of Notary Pub	lic
Witness One		
Na	——————————————————————————————————————	
Witness One Signature	Date	
Printed Name of Witness One	<u> </u>	
Witness Two		
·		
Witness Two Signature	Date	
Printed Name of Witness Two		

DATE	Ξ:	
PRABHU ANNABATHULA		
STATE OF ILLINOIS)		
COUNTY OF)		
The undersigned Notary Public in and for the Coertify that PRABHU ANNABATHULA whose nainstrument, appeared before me this day in personal and delivered the instrument as their free uses and purposes therein set forth.	me is subscribed to the fore on and acknowledged that t	egoing they signed,
Given under my hand and notarial seal this _	day of	, 2014.
My commission expires:	Notary Public Signature	
	Printed Name of Notary Public	-
OR:	Thinou Hamo of Hotaly Fasin	9
Witness One		
Witness One Signature	 Date	
Printed Name of Witness One	·	·
Witness Two		
Witness Two Signature	Date	
Printed Name of Witness Two		

A.K. Well	DATE:	8/20/19	· ·
ANDREW K. WELLS	D) ((L.		
STATE OF ILLINOIS)			
COUNTY OF OTHER)			
The undersigned Notary Public in and for certify that ANDREW K. WELLS whose nat appeared before me this day in person and delivered the instrument as their free and appropriate therein set forth.	me is subscri d acknowledg voluntary act a	bed to the foreged that they signand deed for the	going instrument, ined, sealed and
Given under my hand and notarial seal	this Jobh	lay of MMM	, 2014.
and in the time and notation boar		A La F	, 2014.
My commiss on expires:	- 1V	moto to	MAN
OFFICIAL SEAL NANETTE B ORR	Notar	Public Signature	
Notary Public - State of Illinois	/ / /	HAD ANT	21/01
My Commission Expires Jun 12, 2017	Printé	d Name of Notary	Public
OR:	z •		
Witness One			· ·
Witness One			
			•
Witness One Cierrature			
Witness One Signature		Date	
Printed Name of Witness One		•	
Witness Two			
With less 1 WO			
			7
Witness Two Cinneture		<u> </u>	
Witness Two Signature		Date	
Printed Name of Witness Two			

DATE	<u>:</u>	
WEN HAO ZHANG		
STATE OF ILLINOIS))ss COUNTY OF)		
The undersigned Notary Public in and for the Country that WEN HAO ZHANG whose name is suappeared before me this day in person and acknowledivered the instrument as their free and volunta purposes therein set forth.	bscribed to the foregoing owledged that they signed ry act and deed for the us	instrument, d, sealed and ses and
Given under my hand and notarial seal this	day of	, 2014.
My commission expires:	Notary Public Signature	
OR:	Printed Name of Notary Pub	olic
Witness One		
Witness One Signature	Date	
District O		
Printed Name of Witness One		
Witness Two		
Witness Two Signature	Date	
Printed Name of Witness Two		

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, ADRIAN M. SCHUSTER, WEST OLIVE, MICHIGAN; KEVIN J. BASTYR, MILWAUKEE, WISCONSIN; PRABHU ANNABATHULA, GURNEE, ILLINOIS; ANDREW K. WELLS, LINDENHURST, ILLINOIS; and WEN HAO ZHANG, LAKE VILLA, ILLINOIS 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 entitled "Speaker Equalization Based on Sensor Positional Information" as described, illustrated in Disclosure ID (66190) CS42009 and as described, illustrated and claimed in the following applications:

U.S. Application filed herein and entitled: "Systems and Methods for Equalizing Audio for Playback on an Electronic Device"

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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 re-examinations of such application(s).

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Page 1 of 7

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

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

DATE	E:
ADRIAN M. SCHUSTER	
STATE OF ILLINOIS))ss COUNTY OF)	
The undersigned Notary Public in and for the Coertify that ADRIAN M. SCHUSTER whose name instrument, appeared before me this day in personal and delivered the instrument as their free uses and purposes therein set forth.	e is subscribed to the foregoing on and acknowledged that they signed and voluntary act and deed for the
Given under my hand and notarial seal this _	, day of
My commission expires:	Notary Public Signature
	Printed Name of Notary Public
OR:	
Witness One	
Witness One Signature	Date
Printed Name of Witness One	
Witness Two	
Witness Two Signature	Date
Printed Name of Witness Two	

DATE:		
KEVIN J. BASTYR		
STATE OF ILLINOIS))ss COUNTY OF)		
The undersigned Notary Public in and for the Countries of that KEVIN J. BASTYR whose name is subappeared before me this day in person and acknowled delivered the instrument as their free and voluntary purposes therein set forth.	oscribed to the foregoing instrument, owledged that they signed, sealed and ry act and deed for the uses and	
Given under my hand and notarial seal this	day of, 2014.	
My commission expires:	Notary Public Signature	
OR:	Printed Name of Notary Public	
Witness One		
Witness One Signature	Date	
Printed Name of Witness One		
Witness Two		
Witness Two Signature	Date	
Printed Name of Witness Two		

DATE	:	
PRABHU ANNABATHULA		
STATE OF ILLINOIS)		
COUNTY OF)		
The undersigned Notary Public in and for the Country that PRABHU ANNABATHULA whose naminstrument, appeared before me this day in persousealed and delivered the instrument as their free suses and purposes therein set forth.	ne is subscribed to the foregon and acknowledged that the	going ney signed,
Given under my hand and notarial seal this	day of	, 2014.
My commission expires:	Notary Public Signature	
	Printed Name of Notary Public	
OR:		
Witness One		
Witness One Signature	Date	
Printed Name of Witness One		
<u>Witness Two</u>		
Witness Two Signature	Date	
Printed Name of Witness Two		

DATE	
ANDREW K. WELLS	
STATE OF ILLINOIS))ss COUNTY OF)	
The undersigned Notary Public in and for the Coertify that ANDREW K. WELLS whose name is appeared before me this day in person and acknowledivered the instrument as their free and volunta purposes therein set forth.	subscribed to the foregoing instrument, owledged that they signed, sealed and ry act and deed for the uses and
Given under my hand and notarial seal this _	, day of, 2014.
My commission expires:	Notary Public Signature
OR:	Printed Name of Notary Public
Witness One	
Witness One Signature	Date
Printed Name of Witness One	
Witness Two	
Witness Two Signature	Date
Printed Name of Witness Two	

WEN HAO ZHANG	DATE:	8/18/4
STATE OF ILLINOIS) COUNTY OF ()		
The undersigned Notary Public in and f certify that WEN HAO ZHANG whose nan appeared before me this day in person an delivered the instrument as their free and purposes therein set forth.	ne is subscr d acknowled	ibed to the foregoing instrument, dged that they signed, sealed and
Given under my hand and notarial sea	I this 18^{Ψ}	day of <u>Hugust</u> , 2014.
My commission expires: OFFICIAL SEAL DENICE KRUEGER Notary Public - State of Illinois My Commission Expires Aug 23, 2015 OR:		Pary Public Signature Procedure Notary Public
Witness One		
Witness One Signature		D-1-
Witness One Signature		Date
Printed Name of Witness One		
Witness Two		
Witness Two Signature		Date
Printed Name of Witness Two		-

Page 7 of 7

PATENT REEL: 033579 FRAME: 0425

RECORDED: 08/21/2014