504543551 09/12/2017

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4590258

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOHANNES BOEHM	11/26/2014
SVEN KORDON	11/26/2014
ALEXANDER KRUEGER	11/25/2014
PETER JAX	11/28/2014

RECEIVING PARTY DATA

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Street Address:	1-5 RUE JEANNE D'ARC
City:	ISSY LES MOULINEAUX
State/Country:	FRANCE
Postal Code:	92130

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15685252

CORRESPONDENCE DATA

Fax Number: (415)645-4000

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: (415)645-5773

Email:patents@dolby.comCorrespondent Name:BIANCA MIYAKAWAAddress Line 1:1275 MARKET STREET

Address Line 4: SAN FRANCISCO, CALIFORNIA 94103-1410

ATTORNEY DOCKET NUMBER:	A16013US03
NAME OF SUBMITTER:	BIANCA MIYAKAWA
SIGNATURE:	/Bianca Miyakawa/
DATE SIGNED:	09/12/2017

Total Attachments: 4

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PATENT 504543551 REEL: 043562 FRAME: 0824

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PATENT REEL: 043562 FRAME: 0825

As a below named inventor, I hereby dec	Sere that			
I believe I am the original inventor of	of an original joint invento	or of the subject metter which is at	Aimeri suut tar vahioh a zatani	le sound on
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APPARATUS FOR DECODING MUL	TI-CHANNEL HOA AU	DIO SIGNALS FOR NOISE WE	DUCTION	AND ME INDV AND
the specification of which was filed on	18/JUL/2013	as Application Serial I	***************************************	and was amended or
	. or, if not identi	lanes by liking date and sensi		and was suitabled to
The above identified application wa	at beginning or sufficiency	be made by me	manage, is enterested transfer.	

I have reviewed and understand the contents of the above identified specification, including the claims, as emended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability se defined in 37 CFR 1.56, including for continuation-inpart applications, material information which became available between the filing date of the prior application and the national or PCY international filing date of the continuation-in-part application.

International filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that within false statements and the like so made are pusishable by fine or imprisonment of not more than five (5) years, or both, under (8 USC 1001.

assignment and agreement in an application for letters patent

For valuable consideration received, I hereby sell, assign and transfer to Thomson Licensing, a corporation duty organized and existing under the laws of the country of France, its successors, and assigns my entire right, title and interest, for all countries in and to said inventions, including India and the United States of America, and all the rights and privileges under any and all Letters Petent that may be granted therefor, and any divisions, continuations, releases and extensions thereof.

I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all rightful baths, make all rightful declarations and do all acts which may be necessary, declarate or convenient for securing and maintaining patents or other forms of protection for said inventions in any and all countries and for vesting title thereto in said corporation, its successors, assigns or nominees.

I agree that I will communicate to said corporation or its representatives any facts known to me respecting said inventions and when requested by said corporation and at its expense will testify in any legal proceedings, and generally do everything possibly to aid said corporation, its successors, assigns and legal representatives or nominees, to obtain or entorce proper protection for said inventions in any and all countries.

I suffering and empower said corporation, its successors, assigns or nominees, to make application for patent or other form of protection for said inventions in its or their own name, or in my/our name, in any and all countries and to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convertion for the Protection of Industrial Property, as amended, or by any convention which may transcribe be substituted for it, and to invoke and claim such high of priority without further written or and authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and format equivalent of any assignment, consent to file or like ideal and format equivalent may be available to the said conversition or

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said corporation or its successors, assigns or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the international Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

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I coverant with Thomson Licensing, its successors, assigns, legal representatives, and nominees, that to the best of my knowledge
the right, title and interest herein conveyed by me are free and clear of any encumbrance, and that I have tult right to convey the same as
herein expressed.

Signed at	Hannovar/Germany	Date	2014-11-26
inventor Name	Johannes BOEHM		(Signature in Full – (Sc. Imilialis)
Post Office Address	(Type or Print) Sieberweg 35, 37081 GOETTINGEN, Germa	iny	(Signature in Full — (Signatur
	Susanne WIRTZ		
1 st Witness	(Type or Print)		(Signature in Full - No initials)
2 nd Wilness	Cordula RATAJCZAK		Omerna noto reser
	(Type or Print)		

As a below named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of the subject maker which is claimed and for which a patent is sought on the invention entitled

the investigat entitled:

METHOD AND APPARATUS FOR ENCODING MULTI-CHANNEL HOA AUDIO SIGNALS FOR NOISE REDUCTION, AND METHOD AND APPARATUS FOR DECODING MULTI-CHANNEL HOA AUDIO SIGNALS FOR NOISE REDUCTION

The specification of which was filled on 18/JUL/2013 as AppRoation Sensi No. PCT/EP13/688932 and was amended on

PCT/EP13/688032 and was amended on . or, if not identified here by fiting date and serial number, is attached hereto.

The above-identified application was made or authorized to be made by mo.

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or FCT international filing data of the continuation in-part application.

I horeby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that withful false statements and the like so made ere punishable by line or imprisonment of not more than five (5) years, or both, under 18 USC 100 t.

assignment and agreement in an application for letters patent

For valuable consideration received, I hereby sell, assign and transfer to Thomson Licensing, a corporation duly organized and existing under the laws of the country of France, its successors, and assigns my antive right, little and interest, for all countries in and to said inventions, including India and the United States of America, and all the rights and privileges under any and all Letters Patent that may be granted therefor, and any divisions, continuations, reissues and extensions thereof.

granted terrain, and any divisions, commissions, interests and extensions market.

I agree that, when requested, I wit, without charge to said corporation but at its expense, sign all papers, take all rightful paths, make all rightful declarations and do all acts which may be necessary, destribile or convenient for securing and maintaining patents or other forms of protection for said invanions in any and all countries and for vesting tile thereto in said corporation, its successors, assigns or

I agree that I will communicate to said corporation or its representatives only facts known to me respecting said inventions and when requested by said corporation and at its expense will testify in any legal proceedings, and generally do everything possible to sid said corporation, its successors, assigns and legal representatives or nominees, to obtain or enforce proper protection for said inventions in any

I authorize and empower said corporation, its successors, assigns or nominees, to make application for patent or other form of protection for said inventions in its or their own name, or in mylour name, in any and all countries and to invoke and claim for any application for patent or other form of protection for said inventions itsed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or the document which may be required to any equator for any immore part towns patients by the decrease of the sight of the said properties or

or like doctment which may be required in any assignment one memors a rise sign and rottner equivalent or any assignment. Consent to see or like doctment which may be required in any country for any purpose and more particularly in proof of the right of the said corporation or its successors, assigns or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the International Convention for the Protection of Industrial Property, as assended, or by any convention which may henceforth be substituted for it.

I covenant with Themson Licensing, its successors, easigns, logal representatives, and nominees, that to the best of my knowledge the right, little and interest herein conveyed by me are free and clear of any encumbrance, and that I have full right to convey the same as

Signed at	Hannovar/Germany	Date	2014/11/26
Inventor Name	Sven KORDON		S. C. C.
	(Type or Print)		(Signature in Full - No Initiate)
Post Office	Muehlenkampstr. 60A, 31515 WUNSTOF	RF, German	y
Address	***************************************	~******	
1 st Wilness	Susanne WIRTZ (Type or Print)		(Signature in Full – No Initiass)
[™] Witness	Cordula RATAJCZAK		- Condition Co. Marko roses
	(Type or Print)		

PATENT REEL: 043562 FRAME: 0827 As a below named inventor, I hereby declare that

Hannover/Germany

I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHOD AND APPARATUS FOR ENCODING MULTI-CHANNEL HOA AUDIO SIGNALS FOR NOISE REDUCTION, AND METHOD AND APPARATUS FOR DECODING MULTI-CHANNEL HOA AUDIO SIGNALS FOR NOISE REDUCTION

the specification of which was filed on 16/JUL/2013 as Application Serial No. PCT/EP13/088632 and was amended on

, or, if not identified here by filing date and serial number, is attached hereto.

The shove-identified application was made or authorized to be made by me.
I have reviewed and understand the contents of the above identified specification, including the cisims, as amended by any amendment referred to above.

Lacknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-inpart applications, material information which became available between the lifting date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and ballet are balleved to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment of not more than tive (5) years, or both, under 18 USC 1001.

assignment and agreement in an application for letters patent

For valuable consideration received, I hereby self, seeign and transfer to Thomson Licensing, a corporation duly organized and existing under the taxe of the country of France, its successors, and seeigns my entire right, title and interest, for all countries in and to said inventions, including ladia and the United States of America, and all the rights and privileges under any and all Letters Patent that may be granted therefor, and any divisions, continuations, releases and extensions thereof

I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all rightful paths, make all rightful declarations and do all acts which may be necessary, describble or convenient for securing and maintaining patents or other forms of protection for said inventions in any and all countries and for vesting title therato in said corporation, its successors, assigns or

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I sudmitte and empower said corporation, its successors, assigns or nominees, to make application for patent or other form of protection for said inventions in its or their own name, or in mylour name, in any and all countries and to invoke and claim for any application for patent or other form of protection for said inventions field by it or them, the benefit of the right of priority provided by the international to passes of come fairs or provision as seed interesting and by so many, we present or any interesting provision of the Projection of industrial Property as amended, or by any convention which may henceforth be substituted for it, and to invake and claim such right of priority without further written or one sutherization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formel equivalent of any assignment, consent to the

or tike document which may be required in any country for any purpose and more perticularly in proof of the right of the said corporation or its successors, assigns or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may honcoforth be substituted for it.

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Signed at	HannoverfGermany	Date	2014/11/25
Inventor Name	Alexander KRUEGER		Menodor Krier
	(Type or Print)	***************************************	(Signature in Fult –) (o Initials)
Post Office	Feuerbachstr. 16, 30655 HANNOVS	R, Germany	
Address		***************************************	
1* ⁱ Wilness	Susanne WIRTZ		
r winess	(Type or Prini)		(Signature in Full – No Initials)
nd	Cordula RATAJCZAK		
2 nd Witness	(Type or Print)	******	

PATENT REEL: 043562 FRAME: 0828 As a below named inventor, I hereby declare that:

RECORDED: 09/12/2017

I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought on

METHOD AND APPARATUS FOR ENCODING MULTI-CHANNEL HOA AUDIO SIGNALS FOR NOISE REDUCTION, AND METHOD AND APPARATUS FOR DECODING MULTI-CHANNEL HOA AUDIO SIGNALS FOR NOISE REDUCTION

the specification of which was filed on

18/JUL/2013

as Application Serial No. , or, if not identified here by tiling date and serial number, is attached hereto.

PCT/EP13/985932 and was amended on

The shove-identified application was made or authorized to be made by me

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Learnerson for the Processon of Industrial Property, as amended, or by any convention which may hencerous be substituted for it, and is invoke and claim such right of priority without further written or oral authorization from all formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in priorit of the right of the said corporation or its successors, assigns or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the international Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

I covenant with Thomson Licensing, its successors, assigns, legal representatives, and nominees, that to the best of my knowledge the right, life and interest herein conveyed by me are free and clear of any encumbrance, and that I have full right to convey the same so herein expressed.

Signed at	Hamover/Germany	Date	28.11.2014
Inventor Name	Pater JAX (Type or Print)		Colignature of Fue - No Initialis)
Post Office Address	St.Ingbert-Weg 13, 30559 HANNOVER, G	emany	
1 st Wilness	Susanne WiRTZ (Type or Print)		(Signature in Full – No trailets)
2 nd Wilness	Cordula BATAJCZAK (Type or Print)		

PATENT

REEL: 043562 FRAME: 0829