PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4376153

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOHN SIDNEY STEWART	10/12/2015
LOIC FONTAINE	10/08/2015
ANTHONY PESIN	10/07/2015

RECEIVING PARTY DATA

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City:	ISSY LES MOULINEAUX	
State/Country:	FRANCE	
Postal Code:	92130	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15513361

CORRESPONDENCE DATA

Fax Number: (609)734-6888

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: 609-734-6817

Email: adele.izzo@technicolor.com

Correspondent Name: BRIAN J. DORINI Address Line 1: 4 RESEARCH WAY

Address Line 2: 3RD FLOOR

Address Line 4: PRINCETON, NEW JERSEY 08540

ATTORNEY DOCKET NUMBER:	PU130223	
NAME OF SUBMITTER: JOSEPH J. OPALACH		
SIGNATURE:	/Joseph J. Opalach/	
DATE SIGNED: 04/20/2017		
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 4

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PATENT REEL: 042073 FRAME: 0431 source=PU130223_DeclarationAssignment_4pgs#page3.tif source=PU130223_DeclarationAssignment_4pgs#page4.tif

PATENT REEL: 042073 FRAME: 0432 As a below named inventor, I hereby declare that:

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

FILTERING IDENTIFIER FOR AN OFDM SYSTEM

the specification of which was filed on

September 21, 2015

as Application Serial No.

PCT/US15/51167 and was amended on

, or, if not identified here by filing date and serial number, is attached hereto. The above-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 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-inpart applications, material information which became available between the filing 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 belief are believed 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 five (6) years, or both, under 18 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 duly 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, 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.

I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable 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 possible to aid 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 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 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 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.

covenant 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 full right to convey the same as herein expressed.

Signed at

/19 mondo/

Date

Inventor

Name

John Sidney Stewart

(Type or Print)

(Signature in Fdli No Initials)

Post Office

Address

9145 Doe Spring Drive, Indianapolis, Indiana 46278 USA

1st Witness

(Type or Print)

(Signature in Full - No Initials)

2nd Witness

MARK FRANCIS RUMPERUT

(Signature in Full – No Initials)

PATENT

REEL: 042073 FRAME: 0433

As a below named inventor, I hereby declare that: 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 FILTERING IDENTIFIER FOR AN OFDM SYSTEM the specification of which was filed on September 21, 2015 as Application Serial No. PCT/US15/51167 and was amended on , or, if not identified here by filing date and serial number, is attached hereto.

The above-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 claims, as amended by any amendment referred to above.

l 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 PCT international filling date of the continuation-in-part application.

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are punishable by fine or imprisonment of not more than five (5) years, or both, under 18 USC 1001.

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ressues and extensions thereor.

I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable 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 possible to aid said corporation, its successors, assigns and legal representatives or nominees, to obtain or enforce proper protection for said inventions in any and all countries.

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 my/our name, in any and all countries and to invoke and claim for any application

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 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 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.

I covenant 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 full right to convey the same as herein

Cenon-Sevigné Signed at Date Inventor Name Loic Fontaine (Type or Print) (Signature in Full - No Initials) Post Office Address 3 rue de Cézembre, 35530 Noyal-sur Vilaine FRANCE 1" Witness (Signature in Full - No Initials) TOLLIAN
(Type or Print) 2[™] Witness

(Signature in Full - No Initials)

REEL: 042073 FRAME: 0434

Asa	below	named	inventor,	I hereb	y dec	lare t	hat:
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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

FILTERING IDENTIFIER FOR AN OFOM SYSTEM

the specification of which was filed on

as Application Serial No.

PCT/US15/5116 and was amended on

September 21, 2015

or, if not identified here by filing date and serial number, is attached hereto. The above-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 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 filling 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 belief are believed 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 five (5) years, or both, under 18

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I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable 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.

l 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 possible to aid said corporation, its successors, assigns and legal representatives or nominees, to obtain or enforce proper protection for said inventions in any and all countries.

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 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 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.

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I covenant 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 full right to convey the same as herein expressed.

Signed at	Repres	Date october, the 7th 2015
inventor Name Initials)	Anthony Pesin (Type or Print)	(Signature in Full – No
Post Office Address	36 Rue Des Toiles Residence Castel Parc RDC-,	APPT BOO6 35410 Chateaugiron FRANCE
1" Witness ———	(Type or Print)	(Signature in Full – No Initials)

PATENT REEL: 042073 FRAME: 0435 Customer No. 24498

DECLARATION

Docket No. PU130223

2nd Witness

JULLIAN REZI

(Type or Print)

(Signature in Full - No Initials)

PATENT REEL: 042073 FRAME: 0436

RECORDED: 04/20/2017