503997545 09/09/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4044202

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MAX WARD MUTERSPAUGH	07/23/2013
DANIEL MARK HUTCHINSON	07/22/2013
REJIMON GNANAMMAL VARGHESE	12/09/2014

RECEIVING PARTY DATA

Name:	THOMSON LICENSING	
Street Address:	1, RUE JEANNE D'ARC	
City:	ISSY LES MOULINEAUX	
State/Country:	FRANCE	
Postal Code:	stal Code: 92130	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14407999

CORRESPONDENCE DATA

Fax Number:

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: wendy.canzanese@technicolor.com

Correspondent Name: BRIAN J. DORINI, THOMSON LICENSING LLC
Address Line 1: 4 RESEARCH WAY, PATENT OPERATIONS
Address Line 4: PRINCETON, NEW JERSEY 08054-6620

ATTORNEY DOCKET NUMBER:	PU120075
NAME OF SUBMITTER:	MICHAEL A. PUGEL
SIGNATURE: /Michael A. Pugel, Reg. No 57368/	
DATE SIGNED: 09/09/2016	

Total Attachments: 3

source=Executed_Assignment#page1.tif source=Executed_Assignment#page2.tif source=Executed_Assignment#page3.tif

PATENT 503997545 REEL: 039680 FRAME: 0930

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

APPARATUS AND METHOD FOR APPLYING SIGNALS INTO A FILTER CIRCUIT

the specification of which was filed on

June 18, 2013 as Application Serial No.

PCT/US13/46216

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

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 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 USC 1001.

ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT

For valuable consideration received, I hereby self, 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.

It 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 tegal 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.

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 expressed.

Signed at

Inventor Name

Max Ward MUTERSPAUGH

(Type or Print)

Date

(Claratura in Eul) | Na laitiala

Post Office Address

582 Hadleigh Court, Westfield, Indiana 46074 USA

1st Witness <

(Type or Print)

(Signatura in Eull No II

2nd Witness

(Type or Print)

Signature in Full - No Initials)

PATENT REEL: 039680 FRAME: 0931 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

APPARATUS AND METHOD FOR APPLYING SIGNALS INTO A FILTER CIRCUIT

the specification of which was filed on June 18, 2013 as Application Serial No.

PCT/US13/46216 , or, if not identified here by filing date and serial number, is attached hereto. and was amended on

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 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.

Lagree 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.

Lagree 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.

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 aforesald 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.

Loovenant 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 Indianapalis, Indiana	Date 7-22-20/3
Inventor Name Daniel Mark HUTCHINSON (Type or Print)	(Signature in Full – No Initials)
Post Office Address 13790 Laredo Drive, Carmel, Indiana 46032 USA	

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

APPARATUS AND METHOD FOR APPLYING SIGNALS INTO A FILTER CIRCUIT

the specification of which was filed on

June 18, 2013 , or, if not identified here by filing date and serial number, is attached hereto.

as Application Serial No. PCT/US13/46216

1 me 2014

and was amended on

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

Filmingston made

RECORDED: 09/09/2016

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 become 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 tine or imprisonment of not more than five (5) 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, deskrable 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 ald 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.

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.

Olymed a		3.00
	Rejimon Gnanammal VARGHESE (Type or Print)	(Signature in Full – Ng-Initials)
man en action de la constant	C. A Million	No. of the Contract of the Con
	ce Address 2598 Scottish Bend, Carmel, Indiana 46033 USA	
1 st Witnes	ss Suzanne Schumach (Type or Print)	V June Edumader (Signature in Full – No Initials)
	ss Randi Anderson (Type or Print)	(Signature in Full – No Initials)

PATENT

REEL: 039680 FRAME: 0933