504677424 12/07/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4724146

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DA	ТА			
		Name		Execution Date
THOMSON LICENSING	S.A.			12/07/2017
RECEIVING PARTY DA	ТА			
Name:	THOMSO	N LICENSING		
Street Address:	1 RUE JE	ANNE D'ARC		
City:	ISSY LES	MOULINEAUX		
State/Country:	FRANCE			
Postal Code:	92130			
PROPERTY NUMBERS	Total: 14	Number	-	
Property Type Application Number:	11	Number 698460	_	
Application Number:		565007	_	
Application Number:		523182	_	
Application Number:		468881	_	
Application Number:		189574		
Application Number:		189588	_	
Application Number:		297415	_	
Application Number:		014079	_	
Application Number:		581147	-	
		349503	-	
Application Number:	1		_	
Application Number: Application Number:	11	525376		
		525376 893256	_	
Application Number:	11		-	

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone:609-734-6817Email:donna.foligno@technicolor.com

Address Line 1: 4 R	BRIAN J. DORINI, THOMSON LICENSING LLC 4 RESEARCH WAY PRINCETON, NEW JERSEY 08540				
NAME OF SUBMITTER:	PATRICIA A. VERLANGIERI				
SIGNATURE:	/Patricia A. Verlangieri, Reg.No. 42201/				
DATE SIGNED:	12/07/2017				
Total Attachments: 2 source=Thomson Licensing SA to Thomson Licensing-executed#page1.tif source=Thomson Licensing SA to Thomson Licensing-executed#page2.tif					

ASSIGNMENT

WHEREAS, **Thomson Licensing S.A.**, a corporation organized and existing under the laws of France and having offices at 46, quai Alphonse Le Gallo, F-92100 Boulogne-Billancourt, France, and **THOMSON LICENSING**, a corporation organized and existing under the laws of France and having offices at 1 rue Jeanne d'Arc, 92130 Issy-les Moulineaux, France entered into an agreement calling for the assignment of certain inventions, to **THOMSON LICENSING**;

NOW THEREFORE, **Thomson Licensing S.A.**, in consideration of the mutual covenants of said agreement, does hereby assign to **THOMSON LICENSING**, its successors and assigns, THOMSON LICENSING's entire right, title and interest, for all countries and states, in and to, and including any right to claim priority of:

US Application No. 11/698460 filed January 26, 2007 Title: AUTHENTICATION OF DATA IN A DIGITAL TRANSMISSION SYSTEM Docket Number: CPT98003-US-CNT[2]

US Application No. 14/565007 filed December 9, 2014 Title: LAST AUDIO/VIDEO SEQUENCE IN LOOP MODE ON A DIGITAL SYSTEM Docket Number: PF020045-US-CNT

US Application No. 10/523182 filed July 21, 2003 Title: ANTENNA Docket No. PF020098-US-PCT

US Application No. 10/468881 filed February 28, 2002 Title: FEATURE TO NARROW DSS KEYWORD SEARCH Docket No. PU010042-US-PCT

US Application No. 12/189574 filed August 11, 2008 Title: METHOD AND SYSTEM FOR CONTROLLING AND AUDITING CONTENT/SERVICES Docket No. PU050099-US-DIV[1]

US Application No. 12/189588 filed August 11, 2008 Title: METHOD AND SYSTEM FOR CONTROLLING AND AUDITING CONTENT/SERVICES Docket No. PU050099-US-DIV[2]

US Application No. 09/297415 filed April 29, 1999 Title: SEPARATE POWER SUPPLIES FOR STANDBY OPERATION Docket No. RCA88471-US-NP

US Application No. 11/014079 filed December 15, 2004 Title: LOW NOISE ENCODING AND DECODING METHOD Docket No. RCA88692-US-CNT[1]

US Application No. 09/581147 filed June 8, 2000 Title: PEAK TO PEAK SIGNAL DETECTOR FOR AUDIO SYSTEM Docket No. RCA88835-US-NP

US Application No. 12/349503 filed January 6, 2009 Title: ADVERTISING IN CHANNEL SURF LIST Docket No. RCA89532-US-DIV

> PATENT REEL: 044334 FRAME: 0778

US Application No. 11/525376 filed September 22, 2006 Title: ISOLATE 12C BUS FROM TERRESTRIAL TUNER TO IMPROVE PERFORMANCE OF HDTV DEMODULATION Docket No. RCA89647-US-DIV[1]

US Application No. 11/893256 filed August 15, 2007 Title: ISOLATE 12C BUS FROM TERRESTRIAL TUNER TO IMPROVE PERFORMANCE OF HDTV DEMODULATION Docket No. RCA89647-US-DIV[2]

US Application No. 10/146152 filed May 14, 2002 Title: VIDEO ENCODING METHOD AND APPARATUS Docket No. RCA89717-US-DIV[1]

US Application No. 10/145221 filed May 14, 2002 Title: VIDEO ENCODING METHOD AND APPARATUS Docket No. RCA89717-US-DIV[2]

THOMSON LICENSING

By:/adn

Attorney's Name: Patricia A. Verlangieri Sr. Patent Counsel, Thomson Licensing LLC. And Attorney in Fact for THOMSON LICENSING

THOMSON LICENSING DTV

Attorney's Name: Patricia A. Verlangieri Sr. Patent Counsel Thomson Licensing LLC. And Attorney in Fact for Thomson Licensing S.A.

NOTARIAL CERTIFICATE

State of New Jersey)) :ss County of Middlesex)

I do hereby certify that THOMSON LICENSING, and THOMSON LICENSING DTV, mentioned in the foregoing Assignment, both having offices at the addresses listed above, are corporations organized and existing under the laws of France and that **Patricia A. Verlangieri**, who signed the foregoing Assignment this day, is/are fully authorized to execute the document on behalf of THOMSON LICENSING and THOMSON LICENSING DTV, respectively, for this purpose.

Signed and sealed this	<u></u> day of	Pecember	2017.
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WENDY L. CANZANESE NOTARY PUBLIC OF NEW JERSEY My Commission Expires 9/21/2022

PATENT REEL: 044334 FRAME: 0779

Rev. 07/2015

RECORDED: 12/07/2017