### 504630029 11/07/2017

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4676747

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
XIAOAN LU	11/11/2009
JOLE SOLE	11/16/2009
PENG YIN	11/24/2009
QIAN XU	11/11/2009
YUNFEIZHENG	11/11/2009

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### **PROPERTY NUMBERS Total: 1**

Property Type	Number				
Application Number:	15728617				

#### **CORRESPONDENCE DATA**

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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.

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ATTORNEY DOCKET NUMBER:	PU090143 US CNT		
NAME OF SUBMITTER:	RONALD KOLCZYNSKI		
SIGNATURE:	/Ronald Kolczynski/		
DATE SIGNED:	11/07/2017		

**Total Attachments: 6** 

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PATENT REEL: 044048 FRAME: 0388 Customer No. 24498

#### Docket No.PU090143

#### ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA

I hereby d	eclare that I am the sole inv	entor (if only one inventor is	named below) or o	ne of .	5 joint inve	ntors (if plural inventors are named below) of t
inventions relating	to METHODS AND APP	ARATUS FOR EMBEDDED	OP ADJUSTMENT	IN VI	DEO CODECS	
described in an Ap Docket	plication for Patent filed on	October 5, 2009	under Seria	No.	61/248,541	and described in the file associated w
			/ filing date and ser	ial num	iber or by the Docket	t Number listed above, executed by me on eve
,	ition of this Assignment/Agr		4 . 900			
country of France, and all Letters Pate I agree the	its successors, and assign: int that may be granted the it, when requested, I will, w	s my entire right, little and in refor, and any divisions, conf ithout charge to said corport	terest, for all countr inuations, reissues ation but at its expe	ries in a and ex inse, si	and to said invention densions thereof, on all papers, take a	organized and existing under the laws of the s, and all the rights and privileges under any Il rightful oaths, make all rightful declarations
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representatives or :	nominees, to obtain or enfo	rce proper protection for said	inventions in any	and all	countries	orporation, its successors, assigns and legal or other form of protection for said inventions
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i covenan	t with Thomson Licensing,	or by any convention which its successors, assigns, le ear of any encumbrance, an	gal representatives	and	nominees, that to th	ne best of my knowledge the right, title and erein expressed.
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Inventor (1)	Xiaoan Lu				NIODON	
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	Post Office Address	30 Kennedy Court,	Princeton, Ne	w Je	rsey 08540 U	3A
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Inventor (2)	Joel Sole				was a	
7	(Type or Print)			(Sig	mature in Full. No in	litials.)
-	Post Office Address	1006 Quail Ridge D	rive, Plainsbo	oro, N	lew Jersey 08	536 USA
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Inventor (3)	Peng Yin					
	(Type or Print)			(Sg	inature in Full. No in	litiais.)
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REEL: 024988 FRAME: 0089

# ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA (Cont'd)

Signed at	Princeton, Ne	w Jersey	Date	
Inventor (4)	Qian Xu			
	(Type or Print)	RANKARAKAN MARAKAN MAR		(Signature in Full. No initials.)
ı	Post Office Address	5914 Ravens Crest Driv	e, Plainst	ooro, New Jersey 08536 USA
1st Witness	(Type or Print)	***************************************		(Signature in Full. No initials.)
2nd Witness		naanaanaanaanaanaanaanaanaanaanaanaanaa	<b></b>	
	(Type or Print)	***************************************	***************************************	(Signature in Full. No initials.)
Signed at	Princeton, Nev	y Jersey	Date	
Inventor (5)	Yunfei Zhen	Q		
	(Type or Print)	<b>*************************************</b>	****	(Signature in Full. No Initials.)
ş	Post Office Address	123 Quail Ridge Drive, F	Plainsbord	o, New Jersey 08536 USA
1st Witness				
	(Type or Print)			(Signature in Full. No Initials.)
2nd Witness	(Type or Print)	TP BEP BEKKERKERKERKERKERKERKERKERKERKERKERKERKE		(Signature in Full. No initials.)
Signed at			Date	
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Inventor (6)				
	(Type or Print)			(Signature in Full. No initials.)
F	ost Office Address			
1st Witness				
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2nd Witness	Property Police			
	(Type or Print)		***************************************	(Signature in Full. No Initials.)
Signed at	********************************	######################################	Date	
inventor (7)				
	(Type or Print)			(Signature in Full. No initials.)
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PO 8ax 5312
Princeton, NJ 08543-

Pat Form Rev. 03/22/2006

PATENT REEL: 024980 FRAME: 0000

# ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA

inventions relating to METHODS AND APPARATUS F	OR EMBEDDED QP ADJUSTMENT IN VIDEO CODECS
described in an Application for Patent filed on October Docket	5, 2009 under Serial No. 61/248,541 and described in the file associated with
	identified here by filing date and serial number or by the Docket Number listed above, executed by me on even
date with my execution of this Assignment/Agreement.	
country of France, its auccessors, and assigns my entire and all Letters Patent that may be granted therefor, and a lagree that, when requested, I will, without char and do all acts which may be necessary, desirable or or countries and for vesting title thereto in said corporation. I agree that I will communicate to said corporation and at its expense will testify in any legal prepresentatives or nominees, to obtain or enforce proper I authorize and empower said corporation, its stin its or their own name, or in my/our name, in any arinyentions filed by it or them. The benefit of the right of or	tion or its representatives any facts known to me respecting said inventions and when requested by said occeedings, and generally do everything possible to aid said corporation, its successors, assigns and legal protection for said inventions in any and all countries.  Coessors, assigns or norminees, to make application for patent or other form of protection for said inventions of all countries and to invoke and claim for any application for patent or other form of protection for said private provided by the international Convention for the Protection of Industrial Property as amended on the page.
convention which may henceforth be substituted for it, an I hereby consent that a copy of this assignment may be required in any country for any purpose and mor patent or other proper protection for said inventions, a Protection of Industrial Property, as amended, or by any I covenant with Thomson Licensino, its success	I to invoke and claim such right of priority without further written or oral authorization from me. shall be deemed a full legal and format equivalent of any assignment, consent to file or like document which e particularly in proof of the right of the said corporation or its successors, assigns or nominees to apply for ad to claim the aforesaid benefits of the right of priority provided by the international Convention for the
Signed at	Date
Inventor (1) Xiaoan Lu	
(Type or Print)	(Signature in Full, No initiaks.):
Post Office Address 30 Ken	nedy Court, Princeton, New Jersey 08540 USA
1st Witness	
(Type or Print)	(Signature in Fuil, No initials.)
2ndWitness	
(Type or Print)	(Signature in Full. No initials.)
Signed at	Date
Inventor (2) Joel Sole	
(Type or Print)	(Signature in Full. No initials.)
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1st Witness (Type or Print)	(Signature in Fuil. No initials.)
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(Type or Print)	(Signature in Full, No initials.)
Signed at	Date 1/24/2508
inventor (3) Peng Yin (Type or Print)	(Signature in Full. No initials.)
Post Office Address 6 John	Street, Ithaca, New York 14850 USA
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### ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA (Cont'd)

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Signed at	Princeton, N	ew Jersey	Dale		
Inventor (4)	Qian Xu (Type or Print)				
į į	Post Office Address	5914 Rayens Creet	Drive Olain	(Signature in Full. No initials.)	,
		2014 1804019 01008	Dilve, Flatt	sboro, New Jersey 08536 U	SA
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2nd Witness	(Type or Print)	***************************************	······································	(Signature in Full. No initials.)	***************************************
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Signed at	Princeton, Ne	w Jersey	Date	A	***
inventor (5)	Yunfei Zhei (Type or Print)	ng			
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P	ost Office Address	123 Quail Ridge Dri	ve, Plainsbo	rro, New Jersey 08536 USA	
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Pat F	orm Rev. 03/22/2006			comoust fit	PO Box 5312
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Customer No. 24498

Docket PU090143

# ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA

		•	•		ventors (if plural inventors are named below) of the
rentions relating to	METHODS AND APP	ARATUIS FOR EMBEDDED (	R ADJUSTMENT IN	VIDEO CODECS	***************************************
scribed in an Appl	ication for Patent filed or	October 5, 2009	under Serial No.	61/248,541	and described in the file associated w
ocket No. PUO	90143 listed about this Assignment/Action of this Assignment/Action		iling date and serial nu	mber or by the Doc	ket Number listed above, executed by me on eve
untry of France, is did at Letters Pate 1 agree that did o all acts which untries and for year is agree that reporation and at it presentatives or no it authorize a its or their own noventions filed by it mention which me in hereby cores ay be required in a tent or other propotection of industrial covenant.	a successors, and assign it that may be granted the , when requested. I will, ih h may be necessary, de- titing title thereto in said of it will communicate to it as expense will testify in princes, to obtain or enfi and empower said corpo- name, or in my/our name or them, the benefit of the ay henceforth be substitu- isent that a copy of this sony country for any purpo- per protection for said in all Property, as amended with Thomson Licensing	ns my entire right, title and inter- prefer, and any divisions, contin- without charge to said corporati- strable or convenient for securi- corporation, its successors, assi- said corporation or its represer- any tegal proceedings, and ge- proce proper protection for said is ration, its successors, assigns a- ben in any and all countries and e- right of priority provided by the ted for it, and to invoke and clai- assignment shall be deemed a use and more particularly in pro- ventions, and to claim the afet, or by any convention which m	reat, for all countries in uations, reissues and in on but at its expense, ng and maintaining pa gns or nominees. Itatives any facts kno- nerally do everything ; eventions in any and a or nominees, to make it to invoke and claim e International Conven in such right of priority toll legal and formal evolution of the subsaic pressid benefits of the ay henceforth be subsaic representatives, and	and to said inventi- extensions thereof, sign all papers, task tents or other forms with the processible to aid said il countries application for pate for any application tion for the Protecti- without further writt quivalent of any ass aid corporation or it inght of priority pri tituted for it.	uly organized and existing under the taws of the ions, and all the rights and privileges under any e all rightful oaths, make all rightful declarations is of protection for said inventions in any and all graid inventions and when requested by said i corporation, its successors, assigns and legal interpretation of protection for said inventions for patent or other form of protection for said on of industrial Property, as amended, or by any ten or oral authorization from me. Isignment, consent to file or like document which is successors, assigns or nominees to apply for ovided by the International Convention for the interpretation of the right, title and is herein expressed.
Signed at	***************************************	ARIANNA lambeldishbyinga ngangangangangangangangangangan	Date		
	***************************************	***************************************		***************************************	
Inventor (1)	Xiaoan Lu (Type or Print)			ignature in Full. No	o initials.)
P	ost Office Address	30 Kennedy Court, P	rinceton, New J	ersey 08540 l	USA
1st Witness	(Type or Print)			ignature in Full. No	o initials.)
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Inventor (2)	Joel Sole		orrero orrerero		***************************************
	(Type or Print)		(S	ignature in Full. No	o initials.)
P	ost Office Address	1006 Quail Ridge Dri	ve, Plainsboro,	New Jersey C	98536 USA
1st Witness	(Type or Print)		(5	ignature in Full. No	o init(als.)
2ndWitness	(Type or Print)		(5	ignature in Full. No	o initials.)
Signed at	*****************************	************************************	Date		
inventor (3)	Peng Yin (Type or Print)		(S	ilgnature in Full. No	o initials.)
p	ost Office Address	6 John Street, Ithaca	. New York 148	50 USA	
1st Witness	•			***************************************	

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2ndWitness

(Type or Print)

(Type or Print)

# ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA (Cont'd)

Signed at	Princeton, New Jersey	Date	(1/4/09
Inventor (4)		<b>u</b>	Dec. V
magnor (4)	Qian Xu (Type or Print)	-	(Signature in Full. No initials.)
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	(Type or Print)		(Signature in Full. No initials.)
2nd Witness	tearline Mooning		ALEXANDER STATE OF THE STATE OF
	(Type or Print)	*************	(Signature in Full. No infilals)
Signed at	Princeton, New Jersey	Date	New 11. 2007
Inventor (5)	Yunfei Zheng	_	(Zhath
	(Type or Print)	•	(Signature in Full. Neuhitials.)
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Inventor (7)			
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