502819867 05/22/2014

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZHIGANG ZHANG	07/12/2012
XIAOJUN MA	05/07/2012
ASHWIN KASHYAP	08/08/2012

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14351692

CORRESPONDENCE DATA

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

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ROBERT D. SHEDD, PATENT OPERATIONS THOMS Correspondent Name:

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ATTORNEY DOCKET NUMBER:	R: PA110048	
NAME OF SUBMITTER:	JEFFREY M. NAVON	
SIGNATURE: /Jeffrey M. Navon, Reg. No. 32711/		
DATE SIGNED:	05/22/2014	

Total Attachments: 3

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> **PATENT** REEL: 032946 FRAME: 0084 502819867

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

Docket No. PA110048

I hareby declare that I am the sole inventor (if only one inventor is named below) or one of __3___ joint inventors (i) plural inventors are named below) of inventors relating to

SYSTEM AND METHOD FOR AUTOMATIC CONTENT PROGRAM DISCOVERY

described in an Application filed on

and described in the file associated with Docket No. FA110848 October 19, 2011 under Application No. PCT/CN2611(080884

For valuable consideration received, i hereby sell, sesign 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, little 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, releases and extensions thereof.

I sagree that, when requested 1 will, without charge to said corporation but at its expense, sign at papers, take all rights oaths, make all rights declarations and do all acts which may be necessary, destrable or convenient for securing and maintaining patents or other forms of protection for said inventions in any and all countries and her vession like thereto in said

corporation, its successors, assigns or nonlinees.

1 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 expressive legisty in any logist proceedings, and generally do everything possible to sid said corporation, its successors, assigns and toget representatives or nominees, to obtain or enforce proper protection for said inventions in any and all countries.

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 injustor 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 transforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hareby consent that a copy of this assignment shall be deemed a full legal and format aquivalent 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.

| Covernant 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 encembrance, and that I have full right to convey the same as herein expressed.

Signed at	Toronto, Canada	Date 7/12/2012
Inventor (1)	ZHANG Zhigang	Zhang Zhigang
	(Type or Print)	(Signature in Full. No Initiata.)
Po	osl Office Address BF, Building A TECHNOL BEIJING - CHINA	LOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District,100192
1st Witness	LAN ENEX	Nan Yesen
2ndWiness	Syme or Print) YU (HEN/L	(Signatura in Full, No Initiata)
Numbalmask	Time or Print)	(Signature in Full. No bibliots.)
Signed at	(C)	Clate
American 121	NAA Minahan	
Inventor (2)	MA Xiaojun (Type or Prini)	(Signature in Fig. No inclus)
Po	ost Office Address 8F, Building A TECHNOL BELING - CHINA	LOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District,100192
1st Witness		
191 191016328	(Type or Print)	(Signature in Fu: No mitias t
2ndWitness	(Type or Print)	(Syopeture in Full. Wo initials.)
Signed at		Qate Care
	ADDROGRAM DARRAM RAMAN R	
Seventor (3)	KASHYAP, ASHWIN S.	(Signature in Full, Mo shipas)
		, ,
E Po	osi Office Address 735 Emerson Street, Calif	ifornia 94301 PALO ALTO - USA
Sst W3ness		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(Type or Print)	(Signature in Full. No Initials)
2001///00895	(Type or Print)	(Signature in Fus. No initials.)

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

Docket No. PA110048

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of __g___joint inventors (if plural inventors are named below) of inventors relating to SYSTEM AND METHOD FOR AUTOMATIC CONTENT PROGRAM DISCOVERY described in an Application filed on October 19, 2011 under Application No. PCT/CN2011/080984 ____ and described in the file associated with Docket No. PA110048

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.

I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all nightful caths, make all options 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 the thereto in said

corporation, its successors, assigns or nominees.

I agree that [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 express while testify in any legal proceedings, and generally do everything possible to aid each 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 have and claim

promy 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 chooke and claim such right of priority without burther written or oral authorization from me.

I haveby 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 covernant 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 tree and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Inventor (1) ZHANG Zhigang (Type or Print) Post Office Address 8F, Building A TECHNOLOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District, 19019; BELJING — CHINA 1st Witness (Type or Print) (Signature in Full. No initials.) 2nd/Witness (Type or Print) Signed at Inventor (2) MA Xiaojun (Type or Print) Post Office Address 8F, Building A TECHNOLOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District, 10019; BELJING — CHINA Value Post Office Address 8F, Building A TECHNOLOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District, 10019; BELJING — CHINA Value (Signature in Full. No initials.)			onoconesonononon	
(Type or Print) Post Office Address 8F, Building A TECHNOLOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District, 10019; BELJING - CHINA 1st Witness (Type or Print) (Signature in Full. No initials.) 2nd/Witness (Type or Print) (Signature in Full. No initials.) Signed at Beljing - China Inventor (2) MA Xiaojun (Type or Print) Post Office Address 8F, Building A TECHNOLOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District, 10019; BELJING - CHINA (Dake	Signed at	AATAMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Date .	***************************************
(Type or Print) Post Office Address SF, Building A TECHNOLOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District, 10019; BELJING - CHINA 1st Witness (Type or Print) (Signature in Full. No initials.) 2rxd/Witness (Type or Print) (Signature in Full. No initials.) Signed at Beljing - China Date (Signature in Full. No initials.) Post Office Address SF, Building A TECHNOLOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District, 10019; BELJING - CHINA (Signature in Full. No initials.)	Inventor (1)	ZHANG Zhigang		
Seluting A Community Seluting and A Seluting and			•	(Signature in Full. No Initials.)
(Type or Print) (Signature in Fulf. No initials.) Signed at Date (Signature in Fulf. No initials.) Signed at Inventor (2) MA Xiaojun (Type or Print) Post Office Address 8F, Building A TECHNOLOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District, 100192 BELJING – CHINA	Post	or, banding A 1 Los 1140 Log 1	FORTU	IE CENTER, 8 Xue Qing Road, Hai Dian District,100192
(Signature in Full. No initials.) Signed at Bright China Date The Truly	1st Witness	(Type or Print)		(Signature in Full. No initials.)
Inventor (2) MA Xiaojun (Type or Print) Post Office Address 8F, Building A TECHNOLOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District, 100192 BELJING – CHINA Volume of Print) No. We decided the content of the	2ndWitness	(Type or Print)		(Signature in Full. No initials)
(Type or Print) (Signature in Fell. No initials.) Post Office Address 8F, Building A TECHNOLOGY FORTUNE CENTER, 8 Xue Qing Road, Hai Dian District, 100192 BELING – CHINA Volve :	Signed at	Brigg China	Date .	5/7/2012
BELING - CHINA VOLVE	Inventor (2)			X: COTO W/X (Signature in Fell. No initials.)
Mars Downer	Post t	Office Address 8F, Building A TECHNOLOGY BEIJING - CHINA	FORTUN	IE CENTER, 8 Xue Qing Road, Hai Dian District,100192
(Type or Print) (Signature in Full. No initials.)	1st Witness	(You of Print) Alexander		Man Perper
2ndWitness (Signature in Full. No initials.)	2ndWitness _	VV hem	a	TU CABNO
Signed at Date	Signed at		Date	
Invertor (3) KASHYAP, ASHWIN S. (Type or Print) (Signature in Full. No initials.)	Invertor (3)	W0000000000000000000000000000000000000		(Signature in Full No initials)
Post Office Address 735 Emerson Street, California 94301 PALO ALTO – USA	Posi (94301 P	•
1st Witness	1st Witness			
(Type or Print) (Signature in Full. No initials.)	-	(Type or Print)		(Signature in Full. No initials.)
2ndWitness (Type or Print) (Signature in Full. No initials.)	2ndWitness	(Type or Print)	•	(Signature in Full. No initials.)

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Docket No. PA110048 ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR

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

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of ______ joint inventors (if plural inventors are named below) of the

inventions relating to SYSTEM AND METHOD FOR AUTOMATIC CONTENT	PROGRAM DISCOVERY
described in an Application for Patent filed on October 19, 2011	under Serial No PCT/CN2011/080984 and described in the file associated with
Vivia de la constantina della	date and serial number or by the Docket Number fisted above, executed by me on even
the country of France, its successors, and assigns my entire right, little and inter- and all Letters Patent that may be granted therefor, and any divisions, continuation I agree that, when requested, I wilk, without charge to said corporation to do all acts which may be necessary, desirable or convenient for securing and m and for vesting title thereto in said corporation, its successors, assigns or nomine I agree that I will communicate to said corporation or its representation corporation and at its expense will testify in any legal proceedings, and gene representatives or nominees, to obtain or enforce proper protection for said inver it suthorize and empower said corporation, its successors, assigns or n its or their own name, or in mylour name, in any and all countries and to invoke a by it or them, the benefit of the right of priority provided by the International Com- may henceforth be substituted for it, and to invoke and claim such right of priority I hereby consent that a copy of this assignment shall be deemed a full to be required in any country for any purpose and more particularly in proof of the robust proper protection for said inventions, and to claim the aforesaid benefit industrial Property as amended or by any convention which may henceforth be	ut at its expense, sign all papers, take all rightful caths, make all rightful declarations and shitaining patents or other forms of protection for said inventions in any and all countries set. tives any facts known to me respecting said inventions and when requested by said trafty do everything possible to aid said corporation, its successors, assigns and legal rittens in any and all countries. orninees, to make application for patent or other form of protection for said inventions in and claim for any application for patent or other form of protection for said inventions filled vention for the Protection of Industrial Property, as amended, or by any convention which rightness written or oral authorization from me. significant formal equivalent of any assignment, consent to file or like document which may right of the said corporation or its successors, assigns or nominees to apply for patent or s of the right of priority provided by the International Convention for the Protection of substituted for it.
I covenant with THOMSON LICENSING, its successors, assigns, legi interest herein conveyed by me are free and clear of any encumbrance, and that	al representatives, and nominees, that to the best of my knowledge the right, title and I have full right to convey the same as herein expressed.
Signed at	Date
Inventor (1) Zhigang ZHANG	
(Type or Print)	(Signature in Foil. No initiats.)
Post Office Address 8 th Floor, Building A, To <u>District, Beijing 100192</u>	echnology Fortune Center, No. 8 Xueqing Road, Haidian 2, China
1st Witness	
(Type or Print)	(Signature in Full. No initials)
2ndWitness (Type or Print)	(Signature in Full. No initials.)
Signed at	Diste
triventor (2) Xiaojun MA	
(Type or Print)	(Signature in Full. No iritials.)
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1st Witness	
(Type or Pont)	(Signature in Full. No initials.)
2ndWitness (Type or Print)	(Signature in Full. No initials.)
Signed at Horne.	Date / 9/8/2012
Inventor (3) Ashwin KASHYAP (Type or Print)	(Signature in Full. No initials.)
Post Office Address 2310 Rock Street, Apt.	12, Mountain View, California 94043 USA
1st Witness (Type or Print)	(Signature in Full No mittals.)
2ndWitness	
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