

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT6091570

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
Name		Execution Date
EMPIRE TECHNOLOGY DEVELOPMENT LLC		12/20/2019
RECEIVING PARTY DATA		
Name:	CRAVE LICENSING LLC	
Street Address:	15922 ELDORADO PKWY	
Internal Address:	SUITE 500-1710	
City:	FRISCO	
State/Country:	TEXAS	
Postal Code:	75035	
PROPERTY NUMBERS Total: 48		
Property Type	Number	
Patent Number:	9330359	
Application Number:	15056055	
Patent Number:	9331966	
Patent Number:	9942183	
Patent Number:	9471574	
Patent Number:	10078637	
Patent Number:	9251177	
Patent Number:	9892197	
Patent Number:	9760926	
Patent Number:	9501660	
Patent Number:	9916473	
Patent Number:	9124730	
Patent Number:	9760912	
Application Number:	15700907	
Patent Number:	9590933	
Patent Number:	10063502	
Patent Number:	9208473	
Patent Number:	9930001	
Patent Number:	9282153	

Property Type	Number
Patent Number:	9954964
Patent Number:	9361378
Application Number:	15137301
Patent Number:	9509818
Application Number:	15299840
Patent Number:	9373145
Application Number:	15145920
Patent Number:	10091149
Patent Number:	9569802
Patent Number:	9241035
Application Number:	14953834
Patent Number:	9444797
Patent Number:	9602445
Patent Number:	9967215
Application Number:	13643041
Patent Number:	9392049
Patent Number:	9786297
Application Number:	15729126
Patent Number:	9836650
Patent Number:	9967357
Application Number:	14787135
Patent Number:	9898716
Application Number:	14384962
Application Number:	61086639
Patent Number:	8700663
Application Number:	13642775
PCT Number:	US2009004514
Application Number:	13823099
Application Number:	13823090

CORRESPONDENCE DATA

Fax Number: (832)539-1140

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NAME OF SUBMITTER:	SALLY PUGAL
SIGNATURE:	/Sally Pugal/
DATE SIGNED:	05/05/2020
Total Attachments: 7 source=Crave Licensing (SOCIAL)_Empire_Patent Assignment Exhibit A_20191220#page1.tif source=Crave Licensing (SOCIAL)_Empire_Patent Assignment Exhibit A_20191220#page2.tif source=Crave Licensing (SOCIAL)_Empire_Patent Assignment Exhibit A_20191220#page3.tif source=Crave Licensing (SOCIAL)_Empire_Patent Assignment Exhibit A_20191220#page4.tif source=Crave Licensing (SOCIAL)_Empire_Patent Assignment Exhibit A_20191220#page5.tif source=Crave Licensing (SOCIAL)_Empire_Patent Assignment Exhibit A_20191220#page6.tif source=Crave Licensing (SOCIAL)_Empire_Patent Assignment Exhibit A_20191220#page7.tif	

PATENT ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, Empire Technology Development LLC, a corporation organized and existing under the laws of the State of Delaware, having an address at 251 Little Falls Drive Wilmington, Delaware 19808-1674 (*"Assignor"*), does hereby assign, transfer, and convey unto Crave Licensing LLC, a Texas limited liability company, having an address at 15922 Eldorado Pkwy, Suite 500-1710, Frisco, TX 75035, (*"Assignee"*), or its designees, all right, title, and interest that exist today and may exist in the future in and to any and all of the following (collectively, the *"Patent Rights"*):

(a) the patent applications and patents listed in the table below (the *"Patents"* or *"Patent"*);

TITLE	COUNTRY	APPLICATION NUMBER	PUBLICATION NUMBER	PATENT NUMBER
DEGREES OF CLOSENESS BASED ON COMMUNICATION CONTENTS	PCT	PCT/CN2012/084878	WO2014078984	
DEGREE OF CLOSENESS BASED ON COMMUNICATION CONTENTS	US	14/122971	US20150193684	9330359
DEGREE OF CLOSENESS BASED ON COMMUNICATION CONTENTS	US	15/056055	US20160180227	
PROCESSING CONNECTION REQUEST IN ONLINE SERVICE	PCT	PCT/US2012/045748	WO2014007827	
PROCESSING CONNECTION REQUEST IN ONLINE SERVICE	US	13/701324	US20140012928	9331966
PROCESSING CONNECTION REQUEST IN ONLINE SERVICE	KR	10-2015-7000233	KR20150027200	10-1614665
PROCESSING CONNECTION REQUEST IN ONLINE SERVICE	US	15/084879	US20160212081	9942183
PROPERTY LIST CUSTOMIZATION	PCT	PCT/US2012/047959	WO2014018014	
PROPERTY LIST CUSTOMIZATION	US	13/805785	US20140032546	9471574
PROPERTY LIST CUSTOMIZATION	CN	201280074840.1	CN104487933	ZL201280074840.1
PROPERTY LIST CUSTOMIZATION	US	15/238178	US20160357760	10078637
INFORMATION REMOVAL FROM A NETWORK	PCT	PCT/US2012/042044	WO2013187882	
INFORMATION REMOVAL FROM A NETWORK	US	13/701197	US20130332485	9251177

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TITLE	COUNTRY	APPLICATION NUMBER	PUBLICATION NUMBER	PATENT NUMBER
INFORMATION REMOVAL FROM A NETWORK	CN	201280073925.8	CN104380283	ZL201280073925.8
INFORMATION REMOVAL FROM A NETWORK	US	14/995788	US20160132598	9892197
ON-DEMAND INFORMATION NETWORK	PCT	PCT/US2012/042425	WO2013187900	
ON DEMAND INFORMATION NETWORK	US	13/810,818	US20130339175	9760926
ON-DEMAND INFORMATION NETWORK	KR	10-2014-7033673	KR20150013656	
ON-DEMAND INFORMATION NETWORK	KR	10-2016-7036397	KR20170002697	10-1807456
PRIVACY PROTECTION FOR A LIFE-LOG SYSTEM	PCT	PCT/US2013/049520	WO2015005892	
PRIVACY PROTECTION FOR A LIFE-LOG SYSTEM	US	14/372925	US20150067885	9501660
PRIVACY PROTECTION FOR A LIFE-LOG SYSTEM	US	15/294868	US20170032144	9916473
AUTOMATIC PRIVACY MANAGEMENT FOR IMAGE SHARING NETWORKS	PCT	PCT/US2011/065575	WO2013089785	
AUTOMATIC PRIVACY MANAGEMENT FOR IMAGE SHARING NETWORKS	US	13/519,303	US20130156331	9124730
AUTOMATIC PRIVACY MANAGEMENT FOR IMAGE SHARING NETWORKS		2013-549423		
AUTOMATIC PRIVACY MANAGEMENT FOR IMAGE SHARING NETWORKS	KR	10-2014-7010262	KR20140063839	10-1579016
AUTOMATIC PRIVACY MANAGEMENT FOR IMAGE SHARING NETWORKS	CN	201180073872.5	CN103907120	ZL201180073872.5
AUTOMATIC PRIVACY MANAGEMENT FOR IMAGE SHARING NETWORKS	JP	2015-029290	JP2015143995	6067041
DEVICE TELEMTRY FOR USER EXPERIENCE PREDICTIONS	US	14/311807	US20150369705	9760912
DEVICE TELEMTRY FOR USER EXPERIENCE PREDICTIONS	US	15/700907	US20170372383	
GENERATION OF A COMMUNICATION REQUEST BASED ON VISUAL SELECTION	PCT	PCT/CN2013/087105	WO2015070408	

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TITLE	COUNTRY	APPLICATION NUMBER	PUBLICATION NUMBER	PATENT NUMBER
GENERATION OF A COMMUNICATION REQUEST BASED ON VISUAL SELECTION	US	14/387,081	US20160248711	9590933
GENERATION OF A COMMUNICATION REQUEST BASED ON VISUAL SELECTION	CN	201380080949.0	CN105765567	ZL2013800809490
GENERATION OF A COMMUNICATION REQUEST BASED ON VISUAL SELECTION	US	15/429,881	US20170155606	10063502
CONDITIONAL DISCLOSURE OF A RESPONSE TO CONTENT POSTED IN A SOCIAL NETWORK	PCT	PCT/US2012/066328	WO2014081430	
CONDITIONAL DISCLOSURE OF A RESPONSE TO CONTENT POSTED IN A SOCIAL NETWORK	US	13/878153	US20140143334	9208473
CONDITIONAL DISCLOSURE OF A RESPONSE TO CONTENT POSTED IN A SOCIAL NETWORK	US	14/926417	US20160156585	9930001
CONTENT SUGGESTION FOR POSTING ON COMMUNICATION NETWORK	PCT	PCT/US2012/047313	WO2014014459	
CONTENT SUGGESTION FOR POSTING ON COMMUNICATION NETWORK	US	13/816,102	US20140025737	9282153
CONTENT SUGGESTION FOR POSTING ON COMMUNICATION NETWORK	KR	10-2015-7000286	KR20150037811	10-1648318
CONTENT SUGGESTION FOR POSTING ON COMMUNICATION NETWORK	US	15/002,695	US20160142500	9954964
DETERMINING RELIABILITY OF ONLINE POST	PCT	PCT/US2012/044339	WO2014003735	
DETERMINING RELIABILITY OF ONLINE POST	US	13/820,714	US20140188910	9361378
DETERMINING RELIABILITY OF ONLINE POST	JP	2015-520136	JP2015528940	5968535
DETERMINING RELIABILITY OF ONLINE POST	US	15/137,301	US20160239505	
AUTOMATIC CONTACTS SORTING	PCT	PCT/CN2013/083606	WO2015039276	
AUTOMATIC CONTACTS SORTING	US	14/409530	US20160248895	9509818

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TITLE	COUNTRY	APPLICATION NUMBER	PUBLICATION NUMBER	PATENT NUMBER
AUTOMATIC CONTACTS SORTING	US	15/299840	US20170041444	
SOCIAL NETWORK REPORTS	PCT	PCT/US2011/056598	WO2013058731	
SOCIAL NETWORK REPORTS	US	13/502,088	US20130097241	9373145
SOCIAL NETWORK REPORTS	KR	10-2014-7003121	KR20140045534	10-1638262
SOCIAL NETWORK REPORTS	CN	201180073665.X	CN103827777	ZL201180073665.X
SOCIAL NETWORK REPORTS	JP	2014-534527	JP2014535093	5925324
SOCIAL NETWORK REPORTS	US	15/145,920	US20160246997	
SPOILER ALERT SCHEME	PCT	PCT/US2013/023454	WO2014116261	
SPOILER ALERT SCHEME	US	13/996290	US20140214980	10091149
INVITATION MANAGEMENT BASED ON INVITEE'S BEHAVIOR	PCT	PCT/US2013/036986	WO2014171936	
INVITATION MANAGEMENT BASED ON INVITEE'S BEHAVIOR	US	14/118090	US20140317026	9569802
ORGANIZATION OF INPUTS FOR ONLINE SERVICE	PCT	PCT/US2012/045678	WO2014007826	
ORGANIZATION OF INPUTS FOR ONLINE SERVICE	US	13/701,359	US20140012914	9241035
ORGANIZATION OF INPUTS FOR ONLINE SERVICE	KR	10-2015-7000234	KR20150020664	10-1630136
ORGANIZATION OF INPUTS FOR ONLINE SERVICE	US	14/953,834	US20160080309	
PROTECTION OF PRIVATE DATA	US	14/327814	US20160014094	9444797
REAL-TIME TARGETED MESSAGES	IN	1023/CHE/2011	IN1023CHE2011	
REAL-TIME TARGETED MESSAGES	PCT	PCT/IB2011/052682	WO2012131443	
REAL-TIME TARGETED MESSAGES	US	13/582,831	US20130198299	9602445
REAL-TIME TARGETED MESSAGES	US	15/463,203	US20170195263	9967215
SOCIAL NETWORK RECRUITING ALERTS	PCT	PCT/US2012/045432	WO2014007812	
SOCIAL NETWORK RECRUITING ALERTS	US	13/643,041	US20140297547	
SOCIAL NETWORK RECRUITING ALERTS	KR	10-2015-7000192	KR20150017379	10-1687925
AUTOMATIC CONTENT FORWARDING TO COMMUNICATION NETWORKS	PCT	PCT/US2012/043067	WO2013191681	

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TITLE	COUNTRY	APPLICATION NUMBER	PUBLICATION NUMBER	PATENT NUMBER
Automatic content forwarding to communication networks of content posted from a user	US	13/823,104	US20140032663	9392049
AUTOMATIC CONTENT FORWARDING TO COMMUNICATION NETWORKS	CN	201280074125.8	CN104395896	ZL201280074125.8
IDENTIFICATION BY SOUND DATA	PCT	PCT/US2014/033525	WO2015156798	
IDENTIFICATION BY SOUND DATA	US	14/420858	US20160254009	9786297
IDENTIFICATION BY SOUND DATA	US	15/729126	US20180033451	
IDENTIFICATION OF A PHOTOGRAPHER BASED ON AN IMAGE	US	14/617165	US20160232671	9836650
IDENTIFICATION OF A PHOTOGRAPHER BASED ON AN IMAGE	JP	2016-017655	JP2016146182	6050904
PROXY SERVICE FACILITATION	PCT	PCT/CN2014/072970	WO2015131365	
PROXY SERVICE FACILITATION	US	14/648001	US20150350363	9967357
ASSISTANCE SERVICE FACILITATION	PCT	PCT/CN2014/077783	WO2015176207	
ASSISTANCE SERVICE FACILITATION	US	14/787135	US20160171419	
SOCIAL NETWORK CONSTRUCTION	US	14/316916	US20150381668	9898716
DATA EXCHANGE BETWEEN MULTIPLE SOURCING DEVICES	PCT	PCT/US2014/013161	WO2015112176	
DATA EXCHANGE BETWEEN MULTIPLE SOURCING DEVICES	US	14/384962	US20160239491	
Contextual Keyword-Based Access Control	US	61/086,639		
Contextual Keyword-Based Access Control	US	12/536,411	US20100036836	8700663
CONTEXTUAL KEYWORD-BASED ACCESS CONTROL	PCT	PCT/US2009/004514	WO2010016918	
SOCIAL NETWORK LIMITED OFFER DISTRIBUTION	PCT	PCT/US2012/046022	WO2014011150	
SOCIAL NETWORK LIMITED OFFER DISTRIBUTION	US	13/642,775	US20140019226	
SOCIAL NETWORK LIMITED OFFER DISTRIBUTION	KR	10-2015-7000281	KR20150016631	10-1639958

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TITLE	COUNTRY	APPLICATION NUMBER	PUBLICATION NUMBER	PATENT NUMBER
GROUP NATURE VERIFICATION FOR PROVIDING GROUP INCENTIVES	PCT	PCT/US2012/043058	WO2013191680	
GROUP NATURE VERIFICATION FOR PROVIDING GROUP INCENTIVES	US	13/823,099	US20130339123	
GROUP NATURE VERIFICATION FOR PROVIDING GROUP INCENTIVES	KR	10-2015-7001329	KR20150023800	10-1675038
PROFILE CONSTRUCTION BASED ON ASSERTED INTEREST AND ACTUAL PARTICIPATION IN ASSOCIATED ACTIVITIES	PCT	PCT/US2012/045164	WO2014003798	
PROFILE CONSTRUCTION BASED ON ASSERTED INTEREST AND ACTUAL PARTICIPATION IN ASSOCIATED ACTIVITIES	US	13/823,090	US20140006162	
METHOD AND DEVICE FOR PROFILE CONSTRUCTION BASED ON ASSERTED INTEREST AND ACTUAL PARTICIPATION IN ASSOCIATED ACTIVITIES	KR	10-2014-7033567	KR20150006462	10-1689945

(b) any parents, patents that share the same specification as (a);

(c) any additional patents or applications to which (a) or (b) claims priority, as well as any additional patents and patent applications claiming priority to (a) or (b), including but not limited to patents or patent applications issued, granted, or pending via any divisionals, continuations, continuations-in-part, reissues and reexaminations of (a) and (b);

(d) any patents or patent applications that are terminally disclaimed to any of the foregoing in (a) through (c) or to which any of the foregoing in (a) through (c) are terminally disclaimed;

(e) any foreign counterparts of (a) through (d), wherein all assets included in (a) through (e) shall be herein referred to as "Patents and Related Patents";


(f) all right, title and interest to the Patents and Related Patents.

(g) all of the rights, privileges including the benefits of any attorney client privilege or attorney work product privilege, title and interest in and to the Patents and Related Patents sold, transferred, assigned and set over to Assignee hereunder including all income, royalties, damages and payments now or hereafter due or payable with respect thereto; and

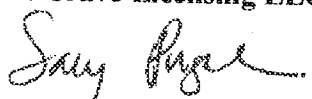
Exhibit A

(h) the right to bring any claim, sue, counterclaim, and recover for the past, present and future infringement of the rights assigned hereunder.

ASSIGNOR: Empire Technology Development LLC

By: 
Name: Thomas C. Kane
Title: CEO
Date: 12-20-2019

ASSIGNEE: Crave Licensing LLC

By: 
Name: Sally Pugal
Title: Managing Member
Date: 12/20/19