PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CALLAHAN CELLULAR L.L.C.	10/31/2019

RECEIVING PARTY DATA

Name:	INTELLECTUAL VENTURES ASSETS 144 LLC
Street Address:	251 LITTLE FALLS DRIVE
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19808

PROPERTY NUMBERS Total: 18

Property Type	Number
Patent Number:	7088364
Patent Number:	7737976
Patent Number:	8400450
Patent Number:	8947428
Patent Number:	6768497
Patent Number:	7256801
Patent Number:	7164714
Patent Number:	7130831
Patent Number:	7225157
Patent Number:	7006844
Patent Number:	7860462
Patent Number:	7308487
Patent Number:	7444353
Patent Number:	7870088
Patent Number:	8509397
Patent Number:	10275208
Patent Number:	7215940
Application Number:	16354031

CORRESPONDENCE DATA

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NAME OF SUBMITTER:	JANICE L. GOEBEL		
SIGNATURE:	/Janice L. Goebel/		
DATE SIGNED:	10/31/2019		

Total Attachments: 10

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ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the receipt of which is hereby acknowledged, Callahan Cellular L.L.C., a Delaware limited liability company having an address at 251 Little Falls Drive, Wilmington, DE 19808 ("Assignor"), does hereby sell, assign, transfer, and convey unto Intellectual Ventures Assets 144 LLC a Delaware limited liability company, having an address at 251 Little Falls Drive, Wilmington, DE 19808 ("Assignee"), or its designees, all of its 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 provisional patent applications, patent applications and patents listed in the table below (the "Patents");

Active Patent(s) - (Filed; Granted)

		Issue Date/	Title of Patent
Patent/Application Number	Country	Filing Date	and First Named Inventor
7088364	US	8/8/2006	Method and system for
			displaying stereoscopic detail-
(10/289453)		(11/7/2002)	in-context presentations
		ļ	
			Lantin, Maria
7737976	US	6/15/2010	Method and system for
(11/410024)		(4/25/2006)	displaying stereoscopic detail-
(11/410024)		(4/25/2006)	in-context presentations
1			Tantin Maria
8400450	US	3/19/2013	Lantin, Maria
8400430	US	3/19/2013	Method and system for
(12/764724)		(4/21/2010)	displaying stereoscopic detail- in-context presentations
(12/704/24)		(4/21/2010)	in-context presentations
			Lantin, Maria
8947428	US	2/3/2015	METHOD AND SYSTEM
			FOR DISPLAYING
(13/845442)		(3/18/2013)	STEREOSCOPIC DETAIL-
			IN-CONTEXT
			PRESENTATIONS
			Touristic Marcula
DEC0125475 2	DE	9/20/2009	Lantin, Maria
DE60135475.3	DE	8/20/2008	ELASTIC PRESENTATION SPACE
(DE60135475.3)		(10/18/2001)	SPACE
(DE00133473.3)		(10/18/2001)	David J Cowperthwaite
FR1327235	FR	8/20/2008	ELASTIC PRESENTATION
FR1327233	1 1	0/20/2006	SPACE SPACE
(FR01978042.8)	ĺ	(10/18/2001)	DI ACE
(12.07)		(10/10/2001)	David J Cowperthwaite
			David J Cowperthwaite

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Patent/Application Number	Country	<u>Issue Date/</u> <u>Filing Date</u>	<u>Title of Patent</u> and First Named Inventor
GB1327235	GB	8/20/2008	
GB1327233	GB	8/20/2008	ELASTIC PRESENTATION
(CD01070042 9)		(10/19/2001)	SPACE
(GB01978042.8)		(10/18/2001)	David I Garage and the
(7(0)07	TIO	7/07/0004	David J Cowperthwaite
6768497	US	7/27/2004	Elastic presentation space
(00/079772)		(10/19/2001)	David I D Door
(09/978773) 7256801	US	(10/18/2001) 8/14/2007	David J. P. Baar
7230801	08	8/14/2007	Elastic presentation space
(10/856807)		(6/1/2004)	David J. Cowperthwaite
DE60243456.4	DE	8/8/2012	System for video transmission
			and processing generating a
(DE60243456.4)		(2/14/2002)	user mosaic
,			
			Martin, François
FR1233614	FR	8/8/2012	System for video transmission
			and processing generating a
(FR02075597.1)		(2/14/2002)	user mosaic
			Martin, François
GB1233614	GB	8/8/2012	System for video transmission
	İ		and processing generating a
(GB02075597.1)		(2/14/2002)	user mosaic
			Martin, Francois
CNZL02106288.9	CN	8/5/2009	Video frequency transmission
			and processing system for
(CN02106288.9)		(2/15/2002)	forming user mosaic image
		4 /4 < /0.00	Martin, Francois
7164714	US	1/16/2007	Video transmission and
(10/07/200)		(0.11.5.10.000)	processing system for
.(10/076330)		(2/15/2002)	generating a user mosaic
		1	Martin Erangois
JP4406750	JP	11/20/2009	Martin, Francois VIDEO TRANSMISSION
. 31 7700/30	31	11/20/2009	SYSTEM FOR
(JP2002-039069)		(2/15/2002)	GENERATING USER
(91 2002-037007)		(2/13/2002)	MOSAIC AND ITS
			PROCESSING SYSTEM
			I ROCEBBINO BIBLEIVI
			Martin, Francois
		l .	11101011, 110110013

Patent/Application Number	Country	<u>Issue Date/</u> Filing Date	<u>Title of Patent</u> and First Named Inventor
KR10-0825213	KR	4/21/2008	System and method of video
14410 0023213	ICIC	1/21/2000	transmission and processing
(KR10-2002-0008290)		(2/16/2002)	for generating a user mosaic,
(1410 2002 0000250)		(2/10/2002)	and recording medium have
			recorded thereon a computer
			program
			program
			Martin, Francois
7130831	US	10/31/2006	Limited-use browser and
			security system
(09/393405)		(9/10/1999)	
			Howard, Christopher J.
7225157	US	5/29/2007	Limited-use browser and
			security system
(09/745395)		(12/21/2000)	
<u> </u>			Howard, Christopher J.
7006844	US	2/28/2006	Adaptive power control for
(4.0.10= 5.54=)		(-14-1-1-1-1	multicast transmission
(10/076617)		(2/19/2002)	
DD:00410004		= 14.0 1= 0.4.0	Sinikka Sarkkinen
DE60351330.1	DE	7/18/2018	Adaptive power control for
(DD(0051000 1)		(0/10/0000)	multicast transmission
(DE60351330.1)		(2/19/2003)	a' '11 a 11'
ED 1450050	ED	7/10/0010	Sinikka Sarkkinen
FR1479252	FR	7/18/2018	Adaptive power control for
(ED 02742622 7)		(2/10/2002)	multicast transmission
(FR03742632.7)		(2/19/2003)	Sinikka Sarkkinen
GB1479252	GB	7/18/2018	
GB1479232	GB	//10/2010	Adaptive power control for multicast transmission
(GB03742632.7)		(2/19/2003)	muticast transmission
(GD05742052.7)		(2/19/2003)	Sinikka Sarkkinen
7860462	US	12/28/2010	Adaptive power control for
7000402	05	12/20/2010	multicast transmission
(11/332751)		(1/13/2006)	mattoust transfillission
(11/302/31)		(1/15/2000)	Sinikka Sarkkinen
7308487	US	12/11/2007	System and method for
		12,11,200,	providing fault-tolerant remote
(10/015322)		(12/12/2001)	controlled computing devices
<u> </u>		(==, ==, ==, ==,	This is a sumpaining devices
			Dansie, Christopher
	·	'	,

7444353	US	10/28/2008	Apparatus for delivering music
			and information
(09/567848)		(5/9/2000)	
			Alexander C. Chen
7870088	US	1/11/2011	METHOD OF DELIVERING
			MUSIC AND
(10/870729)		(6/17/2004)	INFORMATION
			Alexander C. Chen
8509397	US	8/13/2013	Apparatus and methods of
			delivering music and
(12/075261)		(3/11/2008)	information
			Alexander C.
10275208	US	4/30/2019	Apparatus and methods of
			delivering music and
(15/134292)		(4/20/2016)	information
			Alexander C. Chen
(16/354031)	US		Apparatus and methods of
		(3/14/2019)	delivering music and
			information
			Alexander C. Chen
7215940	US	5/8/2007	Integrated circuit
(10/377125)		(2/28/2003)	Goddard, Simon Peter

- (b) all patents and patent applications (i) to which any of the Patents directly or indirectly claims priority, and/or (ii) for which any of the Patents directly or indirectly forms a basis for priority;
- (c) all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, divisions, registrations of any item in any of the foregoing categories (a) and (b);
- (d) all foreign patents, patent applications, and counterparts relating to any item in any of the foregoing categories (a) through (c), including, without limitation, certificates of invention, utility models, industrial design protection, design patent protection, and other governmental grants or issuances;
- (e) all items in any of the foregoing in categories (b) through (d), whether or not expressly listed as Patents above and whether or not claims in any of the foregoing have been rejected, withdrawn, cancelled, or the like;

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- (f) inventions, invention disclosures, and discoveries described in any of the Patents and/or any item in the foregoing categories (b) through (e) that (i) are included in any claim in the Patents and/or any item in the foregoing categories (b) through (e), (ii) are subject matter capable of being reduced to a patent claim in a reissue or reexamination proceeding brought on any of the Patents and/or any item in the foregoing categories (b) through (e), and/or (iii) could have been included as a claim in any of the Patents and/or any item in the foregoing categories (b) through (e);
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- (h) all causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, any of the Patents and/or any item in any of the foregoing categories (b) through (g), including, without limitation, all causes of action and other enforcement rights for
 - (1) damages,
 - (2) injunctive relief, and
 - (3) any other remedies of any kind

for past, current, and future infringement;

- (i) all rights to collect royalties and other payments under or on account of any of the Patents and/or any item in any of the foregoing categories (b) through (h); and
- (j) all rights to the assets listed in the table below, as well as all rights to the inventions, invention disclosures, and discoveries in the assets listed in the table below, together, with the rights, if any, to revive prosecution of claims under such assets and to sue or otherwise enforce any claims under such assets for past, present or future infringement:

Inactive Patent(s) – (Abandoned; Lapsed; Expired)

Patent/Application Number	Country	Issue Date/ Filing Date	Title of Patent and First Named Inventor
(CA2361341)	CA	(11/7/2001)	Use of detail-in-context presentation on stereoscopically paired images
			Lantin, Maria
(CA2323569)	CA	(10/18/2000)	Elastic Presentation Space
			David J Cowperthwaite

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Patent/Application Number	Country	<u>Issue Date/</u> <u>Filing Date</u>	Title of Patent and First Named Inventor
(PCT/CA2001/001472)	wo	(10/18/2001)	Elastic Presentation Space
			David J Cowperthwaite
(CA2425990)	CA	(10/18/2001)	Elastic Presentation Space
			David J Cowperthwaite
EP1327235	EP	8/20/2008	Elastic Presentation Space
(EP01978042.8)		(10/18/2001)	David J Cowperthwaite
JP4410465	JP	11/20/2009	Elastic presentation space
(JP2002-536993)		(10/18/2001)	David J Cowperthwaite
(FR0102137)	FR	(2/16/2001)	Unable to Verify
			Unable to Verify
EP1233614	EP	8/8/2012	System for video transmission and processing generating a
(EP02075597.1)		(2/14/2002)	user mosaic
			Martin, Francois
(PL352270)	PL	(2/15/2002)	Unable to Verify
			Martin, Francois
RU2308172	RU	10/10/2007	System For Transmission And Processing Of Video Signal,
(RU02/010430)	÷	(2/15/2002)	Meant For Creation Of User Mosaics
			Martin, Francois
(BR2002PI01275)	BR	(2/18/2002)	System for video transmission and processing generating a user mosaic
			Martin, Francois

Patent/Application Number	Country	Issue Date/ Filing Date	Title of Patent and First Named Inventor
IN223303 (IN129/MAS/2002)	IN	2/18/2002 (2/18/2002)	VIDEO TRANSMISSION AND PROCESSING SYSTEM FOR GENERATING A USER MOSIAC
			Martin, Francois
(60/119309)	US	(2/8/1999)	VIEW-ONLY WEB BROWSER AND SECURITY
			Howard, Christopher J.
(PCT/US2000/002908)	wo	(2/4/2000)	LIMITED-USE BROWSER AND SECURITY SYSTEM
		•	HOWARD CHRISTOPHER J
8024227	US	9/20/2011	Limited-use browser and security system
(11/742855)		(5/1/2007)	Howard, Christopher J.
8868450	US	10/21/2014	Limited-use browser and security system
(13/212787)		(8/18/2011)	Peter S. Levy
(PCT/IB2003/000579)	wo	(2/19/2003)	Adaptive power control for multicast transmission
· ·			Sinikka Sarkkinen
EP1479252	EP:	7/18/2018	Adaptive power control for multicast transmission
(EP03742632.7)		(2/19/2003)	Sinikka Sarkkinen
(EP18184029.9)	EP	(2/19/2003)	Adaptive power control for multicast transmission
			Sinikka Sarkkinen

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Patent/Application Number	Country	Issue Date/ Filing Date	Title of Patent and First Named Inventor
(60/255212)	US	(12/12/2000)	Blueware web-enabled media and content delivery and tracking systems
			Dressler, Chad
(60/179256)	US	(1/31/2000)	Method and apparatus for providing music and information
			Alexander C. Chen
(60/182309)	US	(2/9/2000)	Method and apparatus for providing music and information
			Alexander C. Chen
(PCT/US2001/003125)	WO	(1/31/2001)	Method and Apparatus for Delivering Music and Information
			Alexander C. Chen
(11/644057)	US	(12/21/2006)	Apparatus and methods of delivering music and information
			Chen Alexander C.
9350788	US	5/24/2016	Apparatus and methods of delivering music and
(13/966224)		(8/13/2013)	information
			Alexander C. Chen
(GB0204708.2)	GB	(2/28/2002)	Integrated circuit
			Unable to verify

Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein.

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Assignor will, at the reasonable request of Assignee, do all things necessary, proper, or advisable, including without limitation, the execution, acknowledgment, and recordation of specific assignments, oaths, declarations, and other documents on a country-by-country basis, to assist Assignee in obtaining, perfecting, sustaining, and/or enforcing the Patent Rights.

The terms and conditions of this Assignment of Patent Rights will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon Assignor, its successors, assigns, and other legal representatives.

on	IN WITNESS WHEREOF this Assignment of Patent Rights is executed at <u>Pellevie, W</u>
	· ····································
	IGNOR: ahan Cellular L.L.C.
Ву:	Jan. /2
Nan	e: Lawrence Finaber
Title	:CFO
	STATE OF WASHINGTON)
)ss. COUNTY OF KING)
	all DO
	On 10/31/19, before me, Shrupe Truott
	Notary Public in and for said State, personally appeared Lawrence Froeher
	personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that
	he/she executed the same in his/her authorized capacity, and that by his/her signature or
	the instrument the person, or the entity upon behalf of which the person acted, executed
	the instrument.
	WITNESS my hand and official seal. (Seal)
	Signature AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
	Notary Public, State of Washington,
	My commission expires: 6/18/33- 55 NOTAA) 4
	Cert # 83/39 100 PUBLIC 17 1
	A WENT THE WASHINGTON

ASSIC Intelle	NEE: tual Ventures Assets 144 LLC
Ву:	Hours Le
Name:	Lawrence Fredom
Title:	
	STATE OF WASHINGTON))ss.
	COUNTY OF KING) On 10/31/19 , before me, Hustine Rust .
	Notary Public in and for said State, personally appeared <u>faired from the personally known</u> to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that ne/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
	WITNESS my hand and official seal. (Seal)
	Signature ///// / January ////
	Notary Public, State of Washington 6/19/32 5
	My commission expires: 6/18/07 PUBLE 18 18 18 18 18 18 18 18 18 18 18 18 18

RECORDED: 10/31/2019