### 10/31/2019 505752048

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5798861

| 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:           | CALLAHAN CELLULAR L.L.C |
|-----------------|-------------------------|
| Street Address: | 251 LITTLE FALLS DRIVE  |
| City:           | WILMINGTON              |
| State/Country:  | DELAWARE                |
| Postal Code:    | 19808                   |

## **PROPERTY NUMBERS Total: 8**

| Property Type       | Number   |
|---------------------|----------|
| Patent Number:      | 8024227  |
| Patent Number:      | 8868450  |
| Patent Number:      | 9350788  |
| Application Number: | 60119309 |
| Application Number: | 60255212 |
| Application Number: | 60179256 |
| Application Number: | 60182309 |
| Application Number: | 11644057 |

### **CORRESPONDENCE DATA**

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Address Line 1: 3150 139TH AVENUE SE Address Line 2: **BUILDING 4, FLOOR 3** 

Address Line 4: **BELLEVUE, WASHINGTON 98005** 

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

**PATENT** REEL: 050883 FRAME: 0723

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# Total Attachments: 10 source=Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC#page1.tif source=Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC#page2.tif source=Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC#page3.tif source=Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC#page4.tif source=Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC#page5.tif source=Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC#page6.tif source=Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC#page7.tif source=Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC#page8.tif source=Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC#page9.tif source=Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC#page9.tif

### 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-<br>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   |
| (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><br><u>Filing Date</u> | <u>Title of Patent</u><br>and First Named Inventor |
|---------------------------|---------|--|--|
| GB1327235                 | GB      | 8/20/2008                                | ELASTIC PRESENTATION                               |
|                           |         |  | SPACE  |
| (GB01978042.8)            |         | (10/18/2001)                             |  |
| (7(0))07                  | 7.10    | 7/07/2004                                | David J Cowperthwaite                              |
| 6768497                   | US      | 7/27/2004                                | Elastic presentation space                         |
| (09/978773)               |         | (10/18/2001)                             | David J. P. Baar                                   |
| 7256801                   | US      | 8/14/2007                                | Elastic presentation space                         |
| (1.6 (2.5 (2.5 )          |         |  |  |
| (10/856807)               |         | (6/1/2004)                               | David J. Cowperthwaite                             |
| DE60243456.4              | DE      | 8/8/2012                                 | System for video transmission                      |
| (DE60243456.4)            |         | (2/14/2002)                              | and processing generating a user mosaic            |
| (DE00243430.4)            |         | (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                      |
| 32123331                  | i       | 0,0,2012                                 | and processing generating a                        |
| (GB02075597.1)            |         | (2/14/2002)                              | user mosaic  |
|                           |         |  |  |
|                           |         |  | Martin, Francois                                   |
| CNZL02106288.9            | CN      | 8/5/2009                                 | Video frequency transmission                       |
| (CINIDA104300 0)          |         | (2/15/2002)                              | and processing system for                          |
| (CN02106288.9)            |         | (2/15/2002)                              | forming user mosaic image                          |
|                           |         |  | Martin, Francois                                   |
| 7164714                   | US      | 1/16/2007                                | Video transmission and                             |
|                           |         |  | processing system for                              |
| (10/076330)               |         | (2/15/2002)                              | generating a user mosaic                           |
|                           |         | 1  | Montin Françaia                                    |
| JP4406750                 | JP      | 11/20/2009                               | Martin, Francois VIDEO TRANSMISSION                |
|                           | *1      | 11/20/2007                               | SYSTEM FOR   |
| (JP2002-039069)           |         | (2/15/2002)                              | GENERATING USER                                    |
| ,                         |         |  | MOSAIC AND ITS                                     |
|                           |         |  | PROCESSING SYSTEM                                  |
|                           |         |  |  |
|                           |         |  | Martin, Francois                                   |

| Patent/Application Number | Country | <u>Issue Date/</u><br>Filing Date | <u>Title of Patent</u><br>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)                      |  |
|                           |         |                                   | Howard, Christopher J.                             |
| 7006844                   | US      | 2/28/2006                         | Adaptive power control for                         |
| (4.0.100.004.00)          | ]       | (2/4 0/2002)                      | multicast transmission                             |
| (10/076617)               |         | (2/19/2002)                       | g: 11 g 11:  |
| DE60351330.1              | DE      | 7/18/2018                         | Sinikka Sarkkinen                                  |
| DE00331330,1              |         | //10/2016                         | Adaptive power control for multicast transmission  |
| (DE60351330.1)            |         | (2/19/2003)                       | muticast transmission                              |
| (DE00331330.1)            |         | (2/17/2003)                       | Sinikka Sarkkinen                                  |
| FR1479252                 | FR      | 7/18/2018                         | Adaptive power control for                         |
|                           |         | 7710/2010                         | multicast transmission                             |
| (FR03742632.7)            |         | (2/19/2003)                       |  |
| ,                         |         |                                   | Sinikka Sarkkinen                                  |
| GB1479252                 | GB      | 7/18/2018                         | Adaptive power control for                         |
|                           |         |                                   | multicast transmission                             |
| (GB03742632.7)            |         | (2/19/2003)                       |  |
|                           |         |                                   | Sinikka Sarkkinen                                  |
| 7860462                   | US      | 12/28/2010                        | Adaptive power control for                         |
|                           |         |                                   | multicast transmission                             |
| (11/332751)               |         | (1/13/2006)                       |  |
| 5000405                   | 7.70    | 10/11/05 = =                      | Sinikka Sarkkinen                                  |
| 7308487                   | US      | 12/11/2007                        | System and method for                              |
| (10/015222)               |         | (10/10/2001)                      | providing fault-tolerant remote                    |
| (10/015322)               |         | (12/12/2001)                      | controlled computing devices                       |
|                           |         | ļ                                 | Dansie, Christopher                                |
|                           | l       |                                   | Dansie, Christophei                                |

| 7444353     | US | 10/28/2008  | Apparatus for delivering music |
|-------------|----|-------------|--------------------------------|
|             |    |             | and information                |
| (09/567848) |    | (5/9/2000)  |                                |
| <u> </u>    |    |             | 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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- (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

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- (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/<br>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   |

Callahan Cellular L.L.C. to Intellectual Ventures Assets i44 LLC Page 5 of 10

| Patent/Application Number | Country | <u>Issue Date/</u><br><u>Filing Date</u> | Title of Patent<br>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/<br>Filing Date | Title of Patent<br>and First Named Inventor                                       |
|------------------------------|---------|----------------------------|---|
| IN223303<br>(IN129/MAS/2002) | IN      | 2/18/2002<br>(2/18/2002)   | VIDEO TRANSMISSION<br>AND PROCESSING<br>SYSTEM FOR<br>GENERATING A USER<br>MOSIAC |
|                              |         |                            | Martin, Francois  |
| (60/119309)                  | US      | (2/8/1999)                 | VIEW-ONLY WEB<br>BROWSER AND SECURITY   |
|                              |         |                            | Howard, Christopher J.  |
| (PCT/US2000/002908)          | wo      | (2/4/2000)                 | LIMITED-USE BROWSER<br>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   |

Callahan Cellular L.L.C. to Intellectual Ventures Assets 144 LLC Page 7 of  $10\,$ 

| Patent/Application Number | Country | Issue Date/<br>Filing Date | Title of Patent and First Named Inventor                                   |
|---------------------------|---------|----------------------------|--|
| (60/255212)               | US      | (12/12/2000)               | Blueware web-enabled media<br>and content delivery and<br>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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|        | na di mantana di mana di mana di mana di mana andri mana andri mana andri mana di mana andri mana di m |
|--------|--|
| onl    | IN WITNESS WHEREOF this Assignment of Patent Rights is executed at <u>Bellevie, Wa</u>   |
|        | GNOR: nan Cellular L.L.C.  |
| Ву:    | Jan 12   |
| Name   | Lawrence Fromber   |
| Title: | CFO  |
|        |  |
|        | STATE OF WASHINGTON ) )ss.   |
|        | COUNTY OF KING )   |
|        | On 10/31/19, before me, When twoff,  |
|        | Notary Public in and for said State, personally appeared Lawrence from the 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 on  |
|        | the instrument the person, or the entity upon behalf of which the person acted, executed   |
|        | the instrument.  |
|        | WUTNESS pry hand and official seal. (Seal)   |
|        | Signature  |
|        | Notary Public, State of Washington My commission expires:  |
|        | Cert # 83/39 PUBLE TO PUBLE  |
|        | THE OF WASHINGTON  |

| ASSIC<br>Intelle | NEE:<br>ctual Ventures Assets 144 LLC   |
|------------------|---|
| Ву:              | Ham /2  |
| Name:            | Company Frontier  |
| Title:           | <u>CFO</u>  |
|                  | STATE OF WASHINGTON ) )ss.  |
|                  | COUNTY OF KING )  On 10/31/19, before me, Husing Pubsit   |
|                  | Notary Public in and for said State, personally appeared  |
|                  | WITNESS my hand and official seal. (Seal)   |
|                  | Signature   |
|                  | Notary Public, State of Washington  |
|                  | My commission expires: 6/18/2 PUBLIC & FUBLIC & |

**RECORDED: 10/31/2019**