11/06/2019 505759167

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5805982

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 150 LLC
Street Address:	251 LITTLE FALLS DRIVE
City:	WILMINGTONG
State/Country:	DELAWARE
Postal Code:	19808

PROPERTY NUMBERS Total: 14

Property Type	Number
Patent Number:	7194618
Patent Number:	8006299
Patent Number:	7954148
Patent Number:	8417956
Patent Number:	8893264
Patent Number:	9374227
Patent Number:	9648028
Patent Number:	10020938
Patent Number:	7043443
Patent Number:	8229848
Patent Number:	6980970
Patent Number:	7853523
Patent Number:	7259673
Application Number:	16029982

CORRESPONDENCE DATA

Fax Number: (425)679-0580

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.

Email: ivrecording@intven.com

INTELLECTUAL VENTURES MANAGEMENT- IP LEGAL Correspondent Name:

> **PATENT** REEL: 050924 FRAME: 0665

505759167

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

Address Line 4: BELLEVUE, WASHINGTON 98005

NAME OF SUBMITTER:

JANICE L. GOEBEL

SIGNATURE:

/Janice L. Goebel/

11/06/2019

Total Attachments: 6

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PATENT REEL: 050924 FRAME: 0666

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 150 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)

Patent/Application		Issue Date/	Title of Patent
<u>Number</u>	Country	Filing Date	and First Named Inventor
7194618	US	3/20/2007	Encryption and authentication systems and methods
(10/092943)		(3/5/2002)	
			Edwin A. Suominen
8006299	US	8/23/2011	Encryption and authentication systems and methods
(11/725735)		(3/19/2007)	
			Edwin A. Suominen
7954148	US	5/31/2011	Encryption and authentication systems and methods
(12/643940)		(12/21/2009)	
			Edwin A. Suominen
8417956	US	4/9/2013	Encryption and authentication systems and methods
(13/214928)		(8/22/2011)	
			Edwin A. Suominen
8893264	US	. 11/18/2014	Encryption and authentication systems and methods
(13/853799)		(3/29/2013)	
			Edwin A. Suominen
9374227	US	6/21/2016	Verification of Signed Digital Documents
(14/537629)		(11/10/2014)	Edwin A. Suominen
9648028	US	5/9/2017	Verification of Signed Video Streams
(15/183145)		(6/15/2016)	Edwin A. Suominen
10020938	US	7/10/2018	SECURE MESSAGING WITH
			DISPOSABLE KEYS
(15/588420)		(5/5/2017)	
			Edwin A. Suominen

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PATENT REEL: 050924 FRAME: 0667

Patent/Application		<u> Issue Date/</u>	Title of Patent
<u>Number</u>	Country	Filing Date	and First Named Inventor
(16/029982)	US		SECURE MESSAGING WITH
		(7/9/2018)	DISPOSABLE KEYS
			Edwin A. Suominen
7043443	US	5/9/2006	Method and system for matching potential
(09/821772)		(3/30/2001)	employees and potential employers over a network
			Firestone, Lisa M.
6980970	US	12/27/2005	Secure networked transaction system
(09/737080)		(12/14/2000)	Scott Krueger
7853523	US	12/14/2010	Secure networked transaction system
(12/356868)		(1/21/2009)	Scott Krueger
8229848	US	7/24/2012	Secure networked transaction system
(12/966558)		(12/13/2010)	Scott Krueger
7259673	US	8/21/2007	Anti-theft arrangement, method and
(10/996800)		(11/24/2004)	program
(10/990000)		(11/24/2004)	Deeds, Douglas

- (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;
- (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

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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);

- (g) all rights to apply in any or all countries of the world for patents, certificates of invention, utility models, industrial design protections, design patent protections, or other governmental grants or issuances of any type related to any item in any of the foregoing categories (a) through (f), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;
- (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		
(60/273862)	US	(3/5/2001)	Encryption and authentication systems and methods		
			Edwin A. Suominen		
(60/193460)	US	(3/31/2000)	Techniques for job placement integrating candidate health and training		
			Firestone, Lisa M.		
(PCT/FI2005/050428)	US	(11/21/2005)	Anti-theft arrangement, method and program		

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<u>Patent/Application</u> <u>Number</u>	Country	<u>Issue Date/</u> <u>Filing Date</u>	<u>Title of Patent</u> and First Named Inventor	
			Deeds, Douglas	

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.

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 October 31,2019.	Patent Rights is	executed at <u>Ball</u>	evue,WA
	GNOR: nan Cellular L.L.C.			
Ву:	Jan 10			
Name:	Lawlence tropber			
Title:	CF0			
	STATE OF WASHINGTON)			
	COUNTY OF KING)			
	, ,	Au.	700	
	On /0/31/19 , before	* *************************************	- KNOTT	
	Notary Public in and for said State, person personally known to me (or proved to me on			
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	the instrument the person, or the entity upon	behalf of which	the person acted,	executed
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RECORDED: 11/06/2019

PATENT REEL: 050924 FRAME: 0672