## 505834634 12/23/2019

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5881568

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:			ASSIGNMENT	
CONVEYING PARTY	DATA			
			Name	Execution Date
HUY PHUONG TRAN				10/30/2019
XU ZHANG				10/31/2019
SANTOSH GHANSHYAM PANDEY				10/31/2019
HUGO LATAPIE				10/31/2019
ABHISHEK MUKHER	JI			10/29/2019
ENZO FENOGLIO				10/30/2019
RECEIVING PARTY I				
Name:		) TECI	HNOLOGY, INC.	
Street Address:	170 W	EST T	ASMAN DRIVE	
City:	SAN J	OSE		
State/Country:	CALIF	ORNIA	4	
Postal Code:	95134			
PROPERTY NUMBE			Number	
Application Number	:	16724	4751	
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		(017)	507-3061	
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<i>Correspondence wil using a fax number,</i> Phone: Email:	if provided	<b>d; if th</b> 617-9 paten	<b>hat is unsuccessful, it will be sent v</b> 913-1996 nt@bigiplaw.com, alexandra.goodwing	via US Mail.
<i>Correspondence wil using a fax number,</i> Phone: Email: Correspondent Nam	if provided	<b>d; if th</b> 617-9 paten BEHN	<b>hat is unsuccessful, it will be sent</b> v 913-1996 ht@bigiplaw.com, alexandra.goodwine WKE INNOVATION GROUP LLC	via US Mail.
Correspondence wil Ising a fax number, Phone: Email: Correspondent Nam Address Line 1:	if provided	d; if th 617-9 paten BEHN ONE	<b>hat is unsuccessful, it will be sent</b> w 913-1996 ht@bigiplaw.com, alexandra.goodwine MKE INNOVATION GROUP LLC INTERNATIONAL PLACE	via US Mail.
Correspondence wil using a fax number, Phone: Email: Correspondent Nam Address Line 1: Address Line 2:	if provided	d; if th 617-9 paten BEHN ONE SUITI	<b>hat is unsuccessful, it will be sent</b> 913-1996 ht@bigiplaw.com, alexandra.goodwine MKE INNOVATION GROUP LLC INTERNATIONAL PLACE E 1400	via US Mail.
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### **Total Attachments: 18**

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WHEREAS, I/we the undersigned inventor(s) (hereinafter "ASSIGNOR(S)") have invented certain new and useful improvements as set forth in the patent application entitled:

## IMAGE-BASED FRAMEWORK FOR IMPROVING LOCATION ESTIMATE ACCURACY IN INDOOR POSITIONING SYSTEMS

⊠which is being filed herewith □which was filed on \_\_\_\_\_\_ as U S Patent Application No

(hereinafter the "Application").

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we, the ASSIGNOR(S)<sup>.</sup>

1) Have assigned, transferred and set over, and by these presents do hereby assign, transfer and set over, unto **Cisco Technology, Inc.**, a California corporation having a place of business at 170 West Tasman Drive, San Jose, California 95134-1706 (hereinafter "ASSIGNEE") and its successors and assigns, each ASSIGNOR's entire right, title, and interest in, to, and under, the Application and any and all improvements disclosed in the Application, as well as any and all other applications that may be based upon, and patent(s) which may be granted upon, the information that is disclosed in the Application, throughout the World, including without prejudice to the generality of the foregoing

the right to file applications and to obtain patents or like protection (including, e g, utility models, inventors' certificates, and/or designs) for the improvements in any country throughout the World, including the right to claim priority from any such application; and any and all provisional, non-provisional, divisional, continuing (whether a continuation or a continuation in part), substitute, renewal, reissue, and other applications for Letters Patent which have been or shall be filed in any country on any of the improvements; and in and to all original and reissued patents which have been or shall be filed in any country on any of the improvements;

2) Authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, as applicable, to issue the same to ASSIGNEE and its successors and assigns, in accordance with the terms of the instrument,

- 3) Covenant and agree, when requested and at no charge to, but at the expense of, ASSIGNEE and its successors and assigns, to: execute all applications for the improvements (including without limitation any and all provisional, non-provisional, divisional, continuing (whether a continuation or a continuation in part), substitute, renewal, reissue, and other patent applications); execute all rightful oaths, assignments, powers of attorney and other papers, communicate to ASSIGNEE, its successors, assigns, and legal representatives, all facts known to the undersigned relating to the improvements and the history thereof; and perform any acts that ASSIGNEE, its successors, assigns or legal representatives consider reasonably necessary for securing and maintaining proper patent protection for the improvements, for vesting title to the improvements and all patent applications and patents for the improvements, in ASSIGNEE and its successors and assigns, and for enforcing the rights of ASSIGNEE and its successor and assigns, in and to any or all of the improvements and any application(s) or patent(s) therefor;
- 4) Covenant and agree that I/we have full right to convey the entire interest herein assigned, and that I/we have not executed, and will not execute, any agreement in conflict herewith.
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- 7) Authorize a representative of Behmke Innovation Group LLC, One International Place, Suite 1400, Boston, MA 02110, Customer No. 126982 to insert in the blanks above the filing date and application number of the Application when known.

Date <u>10/30/</u>2019 Signature Typed Name: Huy Phuong TRAN 532 Brisa Suave Cmn Address Milpitas, CA 95035 **UNITED STATES** 

Signature: Typed Name: Xu ZHANG Address. 550 Moreland Way, Apt. 2714 Santa Clara, CA 95054 UNITED STATES Date

Signature		Date	
• •	ne Santosh Ghanshyam PANDEY 3166 Washington Boulevard Fremont, CA 94539 UNITED STATES		
• •	ne. Hugo LATAPIE 35 East Neapolitan Lane Long Beach, CA 90803 UNITED STATES	Date	
	ne Abhishek MUKHERJI 2080 Country Drive Fremont, CA 94536 UNITED STATES	Date	
- L	ne Enzo FENOGLIO 28, Rue Champ Chardon Issy-les-Moulineaux 92130 FRANCE	Date	



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Signature: Typed Name: Huy Phuong TRAN Address: 532 Brisa Suave Cmm Milpitas, CA 95035 UNITED STATES Date:

Signature: 73 7 22 Typed Name: Xu ZHANG Address: 2000 Walnut Ave, Apt. J304 Fremont, CA 94538 UNITED STATES

Date: 10/31/2019

Signature: Typed Name: Santosh Ghanshyam PANDEY Address: 3166 Washington Boulevard Fremont, CA 94539 UNITED STATES	Date:
Signature: Typed Name: Hugo LATAPIE Address: 35 East Neapolitan Lane Long Beach, CA 90803 UNITED STATES	Date:
Signature: Typed Name: Abhishek MUKHERJI Address: 2080 Country Drive Fremont, CA 94536 UNITED STATES	Date:
Signature: Typed Name: Enzo FENOGLIO Address: 28, Rue Champ Chardon Issy-les-Moulineaux 92130 FRANCE	Date:

Any Docket No. CPOL 10231114 US 0140141414 U



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#### Ann Daalm No. (POL. 10231111, NO. 1044-1411

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nuu:coo.		
	Beaverton, OR 97005	
	UNITED STATES	
Signature:		 Date:
Typed Nat	ne Xu ZHANG	
Address	550 Moreland Way, Apt. 271-	
	Santa Clara, CA 95054	
	UNITED STATES	

REEL: 051354 FRAME: 0357

Any: Docket No.: CPOE 1023111-US 01/0141414.U

Signature March J	Date: 10/31/2019
Typed Name: Santosh Ghanshyam PANDEY Address: 3166 Washington Boulevard Fremont, CA 94539 UNITED STATES	
Signature Typed Name: Hugo LATAPIE Address: 35 East Neapolitan Lane Long Beach, CA 90803 UNITED STATES	Date:
Signature Typed Name – Abhishek MUKHERJI Address – 2080 Country Drive Fremont, CA 94536 UNITED STATES	Date:
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REEL: 051354 FRAME: 0359

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Sıgnature: Typed Name: Xu ZHANG Address 2000 Walnut Ave, Apt. J304	Date:
Fremont, CA 94538 UNITED STATES	PATENT REEL: 051354 FRAME: 0360

Signature Typed Nar Address:	me: Santosh Ghanshyam PANDEY 3166 Washington Boulevard Fremont, CA 94539 UNITED STATES	Date:	
Sıgnature: Typed Naı Address:	me: Hugo LATAPIE 35 East Neapolitan Lane Long Beach, CA 90803 UNITED STATES	Date:	10/31/2019
Sıgnature: Typed Naı Address	me <sup>·</sup> Abhishek MUKHERJI 2080 Country Drive Fremont, CA 94536 UNITED STATES	Date:	
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Signature:		Date:
Typed Nan	ne: Huy Phuong TRAN	
Address:	14190 SW Allen Blvd., Apt. 2	
	Beaverton, OR 97005 UNITED STATES	
Signature:		Date:
Typed Nan	ne: Xu ZHANG	
Address:	550 Moreland Way, Apt. 2714	
	Santa Clara, CA 95054	
	UNITED STATES	

Signature: Typed Name: Santosh Ghanshyam PANDEY Address: 3166 Washington Boulevard Fremont, CA 94539 UNITED STATES	Date:
Signature: Typed Name: Hugo LATAPIE Address: 35 East Neapolitan Lane Long Beach, CA 90803 UNITED STATES	Date:
Signature: <u>Musileb</u> Typed Name: Abhishek MUKHERJI Address: 2080 Country Drive Fremont, CA 94536 UNITED STATES	Date: 10-29-19
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Atty. Docket No.: CPOL 1023111-US.01/0141414.U

# ,1|1,1|1, CISCO

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NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we, the ASSIGNOR(S):

1) Have assigned, transferred and set over, and by these presents do hereby assign, transfer and set over, unto Cisco Technology, Inc., a California corporation having a place of business at 170 West Tasman Drive, San Jose, California 95134-1706 (hereinafter "ASSIGNEE") and its successors and assigns, each ASSIGNOR's entire right, title, and interest in, to, and under, the Application and any and all improvements disclosed in the Application, as well as any and all other applications that may be based upon, and patent(s) which may be granted upon, the information that is disclosed in the Application, throughout the World, including without prejudice to the generality of the foregoing:

the right to file applications and to obtain patents or like protection (including, e.g., utility models, inventors' certificates, and/or designs) for the improvements in any country throughout the World, including the right to claim priority from any such application; and any and all provisional, non-provisional, divisional, continuing (whether a continuation or a continuation in part), substitute, renewal, reissue, and other applications for Letters Patent which have been or shall be filed in any country on any of the improvements; and in and to all original and reissued patents which have been or shall be filed in any country on any of the improvements;

2) Authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, as applicable, to issue the same to ASSIGNEE and its successors and assigns, in accordance with the terms of the instrument;



- 3) Covenant and agree, when requested and at no charge to, but at the expense of, ASSIGNEE and its successors and assigns, to: execute all applications for the improvements (including without limitation any and all provisional, non-provisional, divisional, continuing (whether a continuation or a continuation in part), substitute, renewal, reissue, and other patent applications); execute all rightful oaths, assignments, powers of attorney and other papers; communicate to ASSIGNEE, its successors, assigns, and legal representatives, all facts known to the undersigned relating to the improvements and the history thereof; and perform any acts that ASSIGNEE, its successors, assigns or legal representatives consider reasonably necessary for securing and maintaining proper patent protection for the improvements, for vesting title to the improvements and all patent applications and patents for the improvements, in ASSIGNEE and its successors and assigns, and for enforcing the rights of ASSIGNEE and its successor and assigns, in and to any or all of the improvements and any application(s) or patent(s) therefor;
- Covenant and agree that I/we have full right to convey the entire interest herein assigned, and that I/we have not executed, and will not execute, any agreement in conflict herewith.
- Covenant and agree that the terms, covenants and conditions of this assignment shall inure to the benefit of ASSIGNEE and its successors and assigns, and shall be binding upon me/us and my/our heirs, assigns, and legal representatives.
- 6) Covenant and agree that this assignment and any action, suit, proceeding or claim arising under or relating to this assignment will be governed, interpreted, construed, and enforced in all respects in accordance with the laws of the State of California and by any controlling Federal U.S. law with respect to the subject matter, without reference to its choice of law principles to the contrary.
- Authorize a representative of Behmke Innovation Group LLC, One International Place, Suite 1400, Boston, MA 02110, Customer No. 126982 to insert in the blanks above the filing date and application number of the Application when known.

Signature:	Date:
Typed Name: Huy Phuong TRAN	
Address: 14190 SW Allen Blvd., Apt. 2	
Beaverton, OR 97005	
UNITED STATES	

Signature: Typed Name: Xu ZHANG Address: 550 Moreland Way, Apt. 2714 Santa Clara, CA 95054 UNITED STATES Date:



Atty. Docket No.: CPOL 1023111-US.01/0141414.U

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**RECORDED: 12/23/2019**