504965378 06/18/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5012124

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUPREETH RAO	05/14/2018
NAVINDRA YADAV	05/20/2018
UMAMAHESWARAN ARUMUGAM	05/14/2018
MICHAEL WATTS	05/20/2018
SHASHI GANDHAM	06/17/2018
DUY NGUYEN	05/30/2018
HAI VU	05/14/2018
PRASANNAKUMAR JOBIGENAHALLY MALLESHAIAH	05/15/2018
AIYESHA MA	05/16/2018
KAI ZHU	05/15/2018
DARSHAN SHRINATH PURANDARE	05/25/2018
JOTHI PRAKASH PRABAKARAN	05/18/2018

RECEIVING PARTY DATA

Name:	CISCO TECHNOLOGY, INC.
Street Address:	170 WEST TASMAN DRIVE
City:	SAN JOSE
State/Country:	CALIFORNIA
Postal Code:	95134

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16011427	

CORRESPONDENCE DATA

Fax Number: (415)248-2101

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.

Phone: 415-248-2125

Email: CiscoMail@polsinelli.com

CISCO TECHNOLOGY, INC. C/O POLSINELLI PC **Correspondent Name:**

Address Line 1: 1000 LOUISIANA STREET Address Line 2: SIXTY-FOURTH FLOOR

> PATENT -REEL: 046123 FRAME: 0081

504965378

Address Line 4: HOU	STON, TEXAS 77002	
ATTORNEY DOCKET NUMBER:	589532 (1015910-US.02)	
NAME OF SUBMITTER:	RYAN DAVIS	
SIGNATURE:	/Ryan Davis/	
DATE SIGNED:	06/18/2018	
Total Attachments: 13		
source=085115-589532_1015910-US02	2_Assignments#page1.tif	
source=085115-589532_1015910-US02	2_Assignments#page2.tif	
source=085115-589532_1015910-US02_Assignments#page3.tif		
source=085115-589532_1015910-US02	2_Assignments#page4.tif	
source=085115-589532_1015910-US02	2_Assignments#page5.tif	
source=085115-589532_1015910-US02	2_Assignments#page6.tif	
source=085115-589532_1015910-US02	2_Assignments#page7.tif	
source=085115-589532_1015910-US02	2_Assignments#page8.tif	
source=085115-589532_1015910-US02	2_Assignments#page9.tif	
source=085115-589532_1015910-US02	2_Assignments#page10.tif	
source=085115-589532_1015910-US02	2_Assignments#page11.tif	
source=085115-589532_1015910-US02	2_Assignments#page12.tif	

source=085115-589532_1015910-US02_Assignments#page13.tif



3)

ASSIGNMENT

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:

DISCOVERY OF MIDDLEBOXES USING TRAFFIC FLOW STITCHING

which was filed on ____as U.S. Provisional Patent Application No. _____(hereinafter

⊠which is being filed herewith

tne	Application).
is he	NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which ereby 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;

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.
- 5) 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.
- 7) Authorize a representative of **Polsinelli LLP**, Three Embarcadero Center, Suite 2400, San Francisco, CA 94111, to insert in the blanks above the filing date and application number of the Application when known.

Signature: Typed Name: Address:	Supreeth Rao 21374 Dexter Dr. Cupertino, CA 95014	Date:	<u>14th May 2</u> 018
Signature: Typed Name: Address:	Navindra Yadav 10670 Randy Lane Cupertino, CA 95014	Date:	
Signature: Typed Name: Address:	Umamaheswaran Arumugam 5302 Southbridge Pl. San Jose, CA 95118	Date:	
Signature: Typed Name: Address:	Michael Watts 172 Florence Ave.	Date:	

Mill Valley, CA 94941

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.
- 5) 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.
- 7) Authorize a representative of Polsinelli LLP, Three Embarcadero Center, Suite 2400, San Francisco, CA 94111, to insert in the blanks above the filing date and application number of the Application when known.

Mill Valley, CA 94941

Signature:		Date:
Typed Name:	Supreeth Rao	
Address:	21374 Dexter Dr.	
	Cupertino, CA 95014	
Signature: Typed Name: Address:	Navintra Yadav 10670 Randy Lane Cupertino, CA 95014	Date: 05/20/2012
Signature:		Date:
**	Umamaheswaran Arumugam	
Address:	5302 Southbridge Pl.	
	San Jose, CA 95118	
Signature:		Date:
Typed Name:	Michael Watts	
Address:	172 Florence Ave.	

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.
- 5) 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 Polsinelli LLP, Three Embarcadoro Center, Suite 2400, San Francisco, CA 94111, to insert in the blanks above the filing date and application number of the Application when known.

Signature:		Date:	.00000000000000000000000000000000000000
Typed Name: Address:	Supreeth Rao 21374 Dexter Dr. Cupertino, CA 95014		
Signature:		Date:	
Typed Name: Address:	Navindra Yadav 10670 Randy Lane Cupertino, CA 95014		
Signature:	Armiana Sonara	Date:	05/14/2018
Typed Name: Address:	Umamaheswaran Arumugam 5302 Southbridge Pl. San Jose, CA 95118		
Signature:		Date:	
Typed Name: Address:	Michael Watts 172 Florence Ave.		

Mill Valley, CA 94941

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.
- 5) 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.
- 7) Authorize a representative of Polsinelli LLP, Three Embarcadero Center, Suite 2400, San Francisco, CA 94111, to insert in the blanks above the filing date and application number of the Application when known.

Signature:		Date:
Typed Name:	~	
Address:	21374 Dexter Dr. Cupertino, CA 95014	
Signature:		Date:
Typed Name:		
Address:	10670 Randy Lane Cupertino, CA 95014	
	magnessian, m. c. e. v. v. e.	
Signature:		Date:
Typed Name:	Unsamaheswaran Arumugam	
Address:	5302 Southbridge PL	
	San Jose, CA 95118	
	m ann	- «Inalia
Signature:	Nich of Motor	Date: <u>5/20/18</u> _
Typed Name: Address:	Michael Watts 172 Florence Ave.	

Mill Valley, CA 94941

Signature:	CALL L	Date:	06/17/2011
Typed Name: Address:	Andrew Control of the		
Signature:		Date:	
Typed Name: Address:	Duy Nguyen 1009 Adobe Creek Ct. San Jose, CA 95127		
8	Gatt Jool, Cov 2012 (Date:	
Signature: Typed Name: Address:	3170 Mount Oso Drive		
	San Jose, CA 95148		
Signature: Typed Name: Address:	Prasannakumar Jobigenahally Malleshaiah 1063 Morse Ave. Apt 19-105 Sunnyvale, CA 94089	Date:	
Signature: Typed Name:	Aiyesha Ma	Date:	
Address:	3290 18th St. San Francisco, CA 94110		
Signature: Typed Name: Address:	Kai Zhu 1 Vista Montana, Apt 3402 San Jose, CA 95134	Date:	
Signature: Typed Name:	Darshan Shrinath Purandare 36999 Montecito Dr.	Date:	
Address	Fremont, CA 94536		

PATENT

REEL: 046123 FRAME: 0088

Signature:		Date:	
_	Shashi Gandham		
Address:	34525 Winslow Ter		
	Fremont, CA 94555		
Signature: Typed Name: Address:	Duy Nguyen 1009 Adobe Creek Ct. San Jose, CA 95127	Date:	05/30/2018
Cianotura		Detai	
Signature: Typed Name:	Hai Vu	Date:	
Address:	3170 Mount Oso Drive		
riddi CSS.	San Jose, CA 95148		
	232.002., 212.702.10		
Signature:		Date:	
• •	Prasannakumar Jobigenahally Malleshaiah	1	
Address:	1063 Morse Ave.		
	Apt 19-105		
	Sunnyvale, CA 94089		
Signature:		Date:	
Typed Name:	Aiyesha Ma		
Address:	3290 18th St.		
	San Francisco, CA 94110		
Signature:		Date:	
Typed Name:	Kai 7hu	Date.	
Address:	1 Vista Montana, Apt 3402		
	San Jose, CA 95134		
	·		
O:		D-4-	
Signature:	Darshan Shrinath Purandare	Date:	
Address:	36999 Montecito Dr.		
riduress.	Fremont, CA 94536		
	110110110, 021 7 1000		

And the second s

Superiors Typed Name Address	Sanda Candana 34828 Wandow Tay Frencon, CA 94888	10000	
Signature Transi Name Addina	\$300 Ngg year \$1859 Ashaw Cross Ch \$400 Ngg year \$400 Ngg year		···
Signature Typed Name Addition		, 88	5/14/2019
Name of Typed Name (Address)	Francisco (Marie Antonomici y Marie Antonomici y Antonomici y Marie Antonomici y Ant		,,,,,,
Superiore Typed Name Address	Acycolo Ma 3:380 : 884 Sa San Francisco ("A 981 10		
Square Typed Name Address	Xai Zha 1 Vista Martana, Age 3403 - San Jose, CA 95134		
Newson Types News Address	Dandan Strand Paradar NASS Marca Str Property CA 84536	*****	

Signature:		Date:	
_	Shashi Gandham 34525 Winslow Ter Fremont, CA 94555		
Signature: Typed Name: Address:	Duy Nguyen 1009 Adobe Creek Ct. San Jose, CA 95127	Date:	
Signature: Typed Name: Address:	Hai Vu 3170 Mount Oso Drive San Jose, CA 95148	Date:	
Signature: Typed Name: Address:	Prasannakumar Jobigenahally Malleshaiah 1063 Morse Ave. Apt 19-105 Sunnyvale, CA 94089	Date:	05/15/2018
Signature: Typed Name: Address:	Aiyesha Ma 3290 18th St. San Francisco, CA 94110	Date:	
Signature: Typed Name: Address:	Kai Zhu 1 Vista Montana, Apt 3402 San Jose, CA 95134	Date:	
Signature: Typed Name: Address:	Darshan Shrinath Purandare 36999 Montecito Dr. Fremont, CA 94536	Date:	

Signature Typed Name Address	Shashi Gandham 4525 Winslow Ter Fremont, CA 94555	Date	
Signature Typed Name Address:	Duy Nguyen 1009 Adohe Creek Ct. San Jose, CA 95127	Date	
Signature: Typed Name: Address:	Hai Vu 3 70 Mount Oso Drive San Jose, CA 95 48	Date:	
Signature: Typed Name: Address:	Prasannakumar Jobigenahally Malleshaiah 1063 Morse Ave. Apt 19-105 Sunnyvale, CA 94089	Date:	
Signature: Typed Name: Address:	Aiyesha Ma 3290 18th St. San Francisco, CA 94110	Date:	<u> 46/2018</u>
Signature: Typed Name: Address:	Kai Zhu 1 Vista Montana, Apt 3402 San Jose, CA 95134	Date:	
Signature: Typed Name: Address:	Darshan Shrinsith Purandare 36999 Montecito Dr. Fremont, CA 94536	Date:	

Signature:	realization of the second	Nana	
Typed Nami Address:	e: Shashi Gandham 34525 Winslow Ter Fremont, CA 94555	Date	<u>*************************************</u>
Signature: Typed Name Address:	Duy Nguyen 1009 Adobe Cresk Ct. San Jose, CA 95127	Date:	» "
Signature: Typed Name Address:	: Hai Vu 3170 Mount Oso Drive San Jose, CA 95148	Date	·
Signature: Typed Name: Address:	Prasannakumar Jobigenahally Malleshaiah 1063 Morse Ave. Apt 19-105 Sunnyvale, CA 94089	Date:	
Signature: Typod Name: Address:	Aiyesha Ma 3290 18th St. San Francisco, CA 94110	Date:	· · · · · · · · · · · · · · · · · · ·
Signature: Typed Name: Address:	Kei Zhu Kei Zhu I Vista Montana, Apt 3402 San Jose, CA 95134	Date: - ,	<u> 5715/2</u> 018
Address:	Darshan Shrinath Purandare 36999 Montecito Dr. Fremont, CA 94536	Date:	

Signature:		Date:	
_	Shashi Gandham 34525 Winslow Ter Fremont, CA 94555		
Signature: Typed Name: Address:	Duy Nguyen 1009 Adobe Creek Ct. San Jose, CA 95127	Date:	
Signature: Typed Name: Address:	Hai Vu 3170 Mount Oso Drive San Jose, CA 95148	Date:	
Signature: Typed Name: Address:	Prasannakumar Jobigenahally Malleshaiah 1063 Morse Ave. Apt 19-105 Sunnyvale, CA 94089	Date:	
Signature: Typed Name: Address:	Aiyesha Ma 3290 18th St. San Francisco, CA 94110	Date:	
Signature: Typed Name: Address:	Kai Zhu 1 Vista Montana, Apt 3402 San Jose, CA 95134	Date:	
Signature: Typed Name: Address:	Darshan Shrinath Purandare 36999 Montecito Dr.	Date:	05/25/2018

Fremont, CA 94536

Atty. Docket No.: CPOL 1015910-US.02 (085115-589532)

Signature:

Date: 05/18/2018

Address:

Typed Name: Jothi Prakash Prabakaran 37952 Bright CMN. Fremont, CA 94536

> **PATENT** REEL: 046123 FRAME: 0095

RECORDED: 06/18/2018