504577736 10/03/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4624447

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ANKAN GHOSH	10/02/2017
NATARAJ BACTHU	10/03/2017
APURUP REDDY CHEVURU	10/02/2017
LAXMI KANT AGRAWAL	09/29/2017
SWAMINATHAN NARAYANAN	09/29/2017

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:	15723713

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: 415-248-2100

Email: CiscoMail@polsinelli.com

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

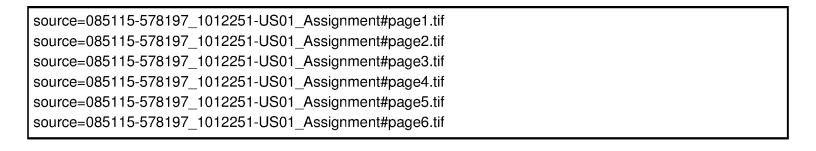
Address Line 1: 1000 LOUISIANA STREET
Address Line 2: FIFTY-THIRD FLOOR
Address Line 4: HOUSTON, TEXAS 77002

ATTORNEY DOCKET NUMBER:	578197 (1012251-US.01)
NAME OF SUBMITTER:	BRIAN MCKNIGHT
SIGNATURE:	/Brian McKnight/
DATE SIGNED:	10/03/2017
	-

Total Attachments: 6

PATENT REEL: 043769 FRAME: 0145

504577736





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:

DYNAMIC ROUTE PROFILE STORAGE IN A HARDWARE TRIE ROUTING TABLE

⊠which is being filed her	ewith	
□which was filed on	as U.S. Patent Application No.	
(hereinafter the "Applic	ation").	

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

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;

- 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.
- 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 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:	Ankan Ghosh 350 Elan Village Ln, Unit 127 San Jose, CA, 95134	_ Date:	10/02/2017
Signature: Typed Name: Address:	Nataraj Baethu 1050 Inverness Way Sunnyvale, CA 94087	_ Date:	
Signature: Typed Name: Address:	Apurus Relidy Chevuru 1603 N Terracina D, Dublin, CA 94568	Date:	10/02/19

Atty. Docket No.: CPOL 1012251-US.01 (085115-578197)

Signature:

Date: 09)29/2017

Address:

Typed Name: Laxmi kant Agrawal 3254 Sangiovese Pl

San Jose, CA 95135

Signature:

Address:

Typed Name: Swaminathan Narayanan 3830 Evangelho Cir San Jose, CA 95148

PATENT

REEL: 043769 FRAME: 0149

Atty. Docket No.: CPOL 1012251-US.01 (085115-578197)

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:

DYNAMIC ROUTE PROFILE STORAGE IN A HARDWARE TRIE ROUTING TABLE

⊠which is being filed	herewith	ì.				
□which was filed on	as U	.S. Patent	Applicati	on No.	 	
(hereinafter the "Ap	plication	").				

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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 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:	<u> </u>
Typed Name: Address:	Ankan Ghosh 350 Elan Village Ln, Unit 127 San Jose, CA, 95134		
Signature: Typed Name: Address:	B. N. Olaso Nataraj Bacthu / 1050 Inverness Way Sunnyvale, CA 94087	Date:	10/3/17
Signature: Typed Name: Address:	Apurup Reddy Chevuru 1603 N Terracina D.	Date:	
	Dublin, CA 94568		

Atty. Docket No.: CPOL 1012251-US.01 (085115-578197)

Signature:		Date:	
Typed Name:	Laxmi kant Agrawal		
Address:	3254 Sangiovese Pl		
	San Jose, CA 95135		
Signature:		Date:	
Typed Name:	Swaminathan Narayanan		
Address:	3830 Evangelho Cir		
	San Jose, CA 95148		

PATENT REEL: 043769 FRAME: 0152

RECORDED: 10/03/2017