# 504901352 05/04/2018

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4948096

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYA	NCE:	ASSIGNMENT	
CONVEYING PARTY D	ΑΤΑ		
		Name	Execution Date
JACKSON NGOC KI PA	NG		04/12/2016
MICHAEL STANDISH W	VATTS		04/15/2016
ALI PARANDEHGHEIBI			04/22/2016
NAVINDRA YADAV			04/22/2018
RECEIVING PARTY DA	TA		
Name:	CISCO T	ECHNOLOGY, INC.	
Street Address:	170 WES	ST TASMAN DRIVE	
City:	SAN JOS	SE	
State/Country:	CALIFOR	RNIA	
Postal Code:	95134		
		Number	
Property Type			
Property Type Application Number:	1	5972033	
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Client Ref. No.: CPOL 999640-US.01

#### ASSIGNMENT (JOINT)

THIS ASSIGNMENT, by Jackson Ngoc Ki Pang: Michael Standish Watts; Ali Parandehgheibi and Navindra Yadav (hereinafter referred to collectively as the "Assignors"), witnesseth:

WHEREAS, said Assignors have invented certain new and useful improvements in: INTERACTIVE HIERARCHICAL NETWORK CHORD DIAGRAM FOR APPLICATION DEPENDENCY MAPPING, set forth in an application for Letters Patent of the United States filed herewith.

WHEREAS, CISCO TECHNOLOGY, INC., a corporation duly organized under and pursuant to the laws of the State of California, and having a principal place of business at 170 West Tasman Drive, San Jose, California 95134 (hereinafter referred to as the "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions and applications for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, said Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto said Assignee, its successors, legal representatives and assigns, Assignors' interest in the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignors, had this sale and assignment not been made; and

FOR THE SAME CONSIDERATION, said Assignors hereby covenant and agree to and with said Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said Assignors are the lawful owners of the entire right, title and interest in and to said invention and the application for Letters Patent above mentioned, and that the same is unencumbered and that said Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth; and

FOR THE SAME CONSIDERATION, said Assignors hereby covenant and agree to and with said Assignee, its successors, legal representatives and assigns, that said Assignors will, whenever counsel of said Assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said Assignee, its successors, legal representatives and assigns.

FOR THE SAME CONSIDERATION, said Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto said Assignee, its successors, legal representatives and assigns, Assignors' interest in the entire right, title and interest in all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to Assignee, or may accrue hereafter including, but not limited to, the right to sue for, collect, and retain damages for past infringement of the said Patents and Applications before or after issuance.

## PATENT REEL: 045725 FRAME: 0660

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IN WITNESS WHEREOF, Assignors have thus set their hands on the dates below written.

Date: 4/12/2016	Signature: Jackson Ngoc Ki Pang
Date:	Signature: Michael Standish Watts
Date:	Signature:
Date:	Signature:

,

### ASSIGNMENT (JOINT)

THIS ASSIGNMENT, by Jackson Ngoc Ki Pang; Michael Standish Watts; Ali Parandehgheibi and Navindra Yadav (hereinafter referred to collectively as the "Assignors"), witnesseth:

WHEREAS, said Assignors have invented certain new and useful improvements in: INTERACTIVE HIERARCHICAL NETWORK CHORD DIAGRAM FOR APPLICATION DEPENDENCY MAPPING, set forth in an application for Letters Patent of the United States filed herewith.

WHEREAS, **CISCO TECHNOLOGY**, **INC.**, a corporation duly organized under and pursuant to the laws of the State of California, and having a principal place of business at 170 West Tasman Drive, San Jose, California 95134 (hereinafter referred to as the "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions and applications for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, said Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto said Assignee, its successors, legal representatives and assigns, Assignors' interest in the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignors, had this sale and assignment not been made; and

FOR THE SAME CONSIDERATION, said Assignors hereby covenant and agree to and with said Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said Assignors are the lawful owners of the entire right, title and interest in and to said invention and the application for Letters Patent above mentioned, and that the same is unencumbered and that said Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth; and

FOR THE SAME CONSIDERATION, said Assignors hereby covenant and agree to and with said Assignee, its successors, legal representatives and assigns, that said Assignors will, whenever counsel of said Assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said Assignee, its successors, legal representatives and assigns.

FOR THE SAME CONSIDERATION, said Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto said Assignee, its successors, legal representatives and assigns, Assignors' interest in the entire right, title and interest in all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to Assignee, or may accrue hereafter including, but not limited to, the right to sue for, collect, and retain damages for past infringement of the said Patents and Applications before or after issuance.

Page 1 of 2

IN WITNESS WHEREOF, Assignors have thus set their hands on the dates below written.

Date:	Signature: Jackson Ngoc Ki Pang
Date: 4/15/2016	Signature: Michael Standish Watts
Date:	Signature: Ali Parandehgheibi
Date:	Signature:

Signature:\_

Navindra Yadav

#### ASSIGNMENT (JOINT)

THIS ASSIGNMENT, by Jackson Ngoc Ki Pang; Michael Standish Watts; Ali Parandehgheibi and Navindra Yadav (hereinafter referred to collectively as the "Assignors"), witnesseth:

WHEREAS, said Assignors have invented certain new and useful improvements in: **INTERACTIVE HIERARCHICAL NETWORK CHORD DIAGRAM FOR APPLICATION DEPENDENCY MAPPING**, set forth in an application for Letters Patent of the United States filed herewith.

WHEREAS, CISCO TECHNOLOGY, INC., a corporation duly organized under and pursuant to the laws of the State of California, and having a principal place of business at 170 West Tasman Drive, San Jose, California 95134 (hereinafter referred to as the "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions and applications for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, said Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto said Assignee, its successors, legal representatives and assigns, Assignors' interest in the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignors, had this sale and assignment not been made; and

FOR THE SAME CONSIDERATION, said Assignors hereby covenant and agree to and with said Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said Assignors are the lawful owners of the entire right, title and interest in and to said invention and the application for Letters Patent above mentioned, and that the same is unencumbered and that said Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth; and

FOR THE SAME CONSIDERATION, said Assignors hereby covenant and agree to and with said Assignee, its successors, legal representatives and assigns, that said Assignors will, whenever counsel of said Assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said Assignee, its successors, legal representatives and assigns.

FOR THE SAME CONSIDERATION, said Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto said Assignee, its successors, legal representatives and assigns, Assignors' interest in the entire right, title and interest in all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to Assignee, or may accrue hereafter including, but not limited to, the right to sue for, collect, and retain damages for past infringement of the said Patents and Applications before or after issuance.

Page 1 of 2

PATENT REEL: 045725 FRAME: 0664

Attorney Docket No. 085115-525602

IN WITNESS WHEREOF, Assignors have thus set their hands on the dates below written.

Date:_		Signature:	
		Jackson Ngoc Ki Pang	· .
Date:		Signature:	
		Michael Standish Watts	
Date:_	4/22/2016	Signature: Mr. Ph. C.	
	Į	Ali Parandehgheibi	
Date:_	4/22/2016	Signature:	÷ .
	·/ /	Navingra Yadav	
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Page 2 of 2

**RECORDED: 05/04/2018**