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02-23-2006



U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

OMB No. 0651-0027 (exp. 6/30/2008) 103183383 PATENTS UNL 1 Ĕ To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below. S 2. Name and address of receiving party(ies) 1. Name of conveying party(ies) Robert Andrews, Navindra Yadav, Shree Murthy, Gnanaprakasam Name: Cisco Technology, Inc. Pandian; Murali Duvvury; Sudhakar Padavala Internal Address: Additional name(s) of conveying party(ies) attached? Yes 🗸 No 3. Nature of conveyance/Execution Date(s): Street Address: 170 West Tasman Drive Execution Date(s) 2/3/06; 2/7/06; 2/9/06; 2/10/06; 2/13/06 ✓ Assignment Merger City: San Jose Change of Name Joint Research Agreement State: Calfornia Government Interest Assignment Zip:95134 Country: USA Executive Order 9424, Confirmatory License Other Additional name(s) & address(es) attached? ☐ Yes No 4. Application or patent number(s): This document is being filed together with a new application. A. Patent Application No.(s) B. Patent No.(s) 02/16/20**6** STEUMEL1 00000014 11353312 40.00 DP 06 FC:80a1 Additional numbers attached? Yes ✓ No 5. Name and address to whom correspondence 6. Total number of applications and patents concerning document should be mailed: involved: one Name: Kuni Oh 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Internal Address: Authorized to be charged by credit card Authorized to be charged to deposit account Street Address: Jackson & Co., LLP **Enclosed** None required (government interest not affecting title) 6114 La Salle Ave., #507 8. Payment Information City: Oakland a. Credit Card Last 4 Numbers 2006 State: CA Zip:94611-2802 Expiration Date <u>07/08</u> Phone Number: (510) 652-6418 b. Deposit Account Number _ Fax Number: (510) 652-5691 Authorized User Name _ Email Address: koh@jacolaw.com 9. Signature: February 13, 2006 Date Seong-Kun Oh (Reg. No 48,210) Total number of pages including cover 10 Name of Person Signing sheet, attachments, and documents:

> Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

> > REEL: 017591 FRAME: 0487

PATENT

Attorney Docket No. CS-05-01

ASSIGNMENT

WHEREAS, WE, Robert Andrews, Navindra Yadav, Shree Murthy, Gnaneprakasam Pandian, Murall Duvvury, and Sudhakar Padvala, hereinafter referred to as "ASSIGNORS", have invented contain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: METHOD AND SYSTEM FOR PROVIDING SAFE DYNAMIC LINK REDUNDANCY IN A DATA NETWORK

Application (Declaration/Oath) Execution Date:

Filing Date: Herewith

Application No.:

WHEREAS, <u>Cisco Technology, Inc.</u>, a corporation of the State of California having a principal place of business at 170 West Tasman Dr., San Jose, CA 95134, hereinafter referred to as "ASSIGNEE", is desirous of acquiring the entire right, title and interest in the sald invention and application and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for Concerns and other good and valuable consideration, receipt of which is hereby acknowledged by Assignors, assignors bave, sold accigned and transfer unto the said Assignee, and Assignee, spreasure, antivactions, and by these presents do sell, assign and transfer unto the said Assignee, and Assignee, and Assignee, and all provided States Letters Patent, and any Letters Patent which they hereafter be granted on the same in the United States and all countries throughout the west including any divisions, repaired to the same in the United States and all countries throughout the west including any divisions, repaired that any open in whole or in part, substitutions, conversions, reissues, prolongations or extensions that they are the transfer and Assignee as fully and exclusively as it would have been held and enjoyed by said Assignors had this assignment and transfer not been made, to the full end and term of any such Letters Patent.

Assignors further agree that they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.

Date: 2/9/2006

Robert Andrews

State of California

County of Sarria Clara

On 2/9/06 before me, BIRGIT RUNKE (MARKET) AND MARKET STATE (MARKET)

personally appeared Robert Andrews

personally appeared Robert Andrews

personally known to me or proved to me on the basis of additionally evidence to be the person(e) whose name(e) Is/are subscribed to the within instrumental acknowledged to me of the hard hard person(e) executed the same in his/ae/hoir authorized capacity(lee), and that by his/her/hoir algumental market acknowledged to the person(e) of the his/her/hoir authorized capacity(lee), and that by his/her/hoir algumental market market acknowledged to the same in his/her/hoir authorized capacity(lee), and that by his/her/hoir algumental market market market acknowledged to the same in his/her/hoir authorized capacity(lee), and that by his/her/hoir algumental market m

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Notary Public - Catiomia
Scarta Clara County
My Control Explas Dec 24, 2008

the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Signature of Notary

	nereunto signed his/heg name togthis assignment on the date indicated below.
Date: 02/07/2006	Nagridra Yadav
	Nagridra Yadav
tate of <u>California</u> ounty of <u>Santa Clar</u> a	V
n <u>2/7/06</u> before me,	
Nicializa to pa the balkou(a) Milosa Inime(a) izlava	personally known to me or proved to me on the basis of satisfactory subscribed to the within instrument and acknowledged to me that he/she/they sity(ies), and that by his/her/their signature(e) on the instrument the person(e), executed the instrument.
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Notary Public - California	B. Paule
My Comm. Supine Dec 24, 2006	Signature of Notary
IN TESTIMONY WHEREOF, Assignor has t	nereunto signed his/her name to this assignment on the date indicated below.
nte: 02/09/06	Shree Murthy
	Shree Murthy
ounty of <u>California</u>	
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n <u>2/9/06</u> before me, <u>F</u>	BIRGIT RUNKE
vidence to be the person(s) whose name(s) is/sub-	personally known to me or proved to me on the basis of satisfactory subscribed to the within instrument and acknowledged to me that be/she/they-
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Commission # 1537848	executed the instrument. WITNESS my hand and official seal.
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evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(les), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

	WITNESS my hand and official seal.
	Signature of Notary
SEAL	Althorna of Marmit
IN TESTIMONY WHEREOF, Assignor	has hereunte eigned his/her name to this assignment on the date indicated below.
	A.L.
Date: Feb 3rd 2006	Murali Duvvury
State of California	
State of <u>California</u> County of <u>Santa Cler</u> a	
On 2/3/06 before me, _	BIRGIT RUNKE
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Date:	uring the second of the second
	Sudhakar Padvala
State of	
County of	
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personally appeared	personally known to me or proved to me on the basis of eatisfactory s/are subscribed to the within instrument and acknowledged to me that he/she/they capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or cled, executed the instrument.
	WITNESS my hand and official seal.
	Signature of Notary

-3-

ASSIGNMENT

WHEREAS, WE, Robert Andrews, Navindra Yadav, Shree Murthy, Gnanaprakasam Pandian, Murali Duvvury, and Sudhakar Padavala, hereinafter referred to as "ASSIGNORS", have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: METHOD AND SYSTEM FOR PROVIDING SAFE DYNAMIC LINK REDUNDANCY IN A DATA NETWORK

Application (Declaration/Oath) Execution Date:

Filing Date: Herewith

Application No.:

WHEREAS, <u>Cisco Technology</u>, <u>Inc.</u>, a corporation of the State of California having a principal place of business at 170 West Tasman Dr., San Jose, CA 95134, hereinafter referred to as "ASSIGNEE", is desirous of acquiring the entire right, title and interest in the said invention and application and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all right, title and interest in and to the said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions, reissues, prolongations or extensions thereof, said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignors had this assignment and transfer not been made, to the full end and term of any such Letters Patent.

Assignors further agree that they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.

Date:		
		Robert Andrews
State of		
County of		
On	before me,	
personally appeared		personally known to me or proved to me on the basis of satisfactory
evidence to be the person	(s) whose name(s) is/are	subscribed to the within instrument and acknowledged to me that he/she/they
the entity upon behalf of w		city(ies), and that by his/her/their signature(s) on the instrument the person(s), executed the instrument.
		WITNESS my hand and official seal.
		Signature of Notary

-1-

or

Date: Navindra Yadav State of _____ County of ____ ____ before me, _ _ personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(les), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal. Signature of Notary IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below. Deta: Shree Murthy State of _____ County of ______ ___ before me, _ personally known to me or proved to me on the basis of satisfactory personally appeared _ evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal. Signature of Notary IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below. State of California
County of Santa Clara on 2/13/06 before me, BIRGIT RUNKE personally appeared <u>6WANAPRAKASAM</u> personally known to me or proved to me on the basis of satisfactory

IN TESTIMONY WHEREOF. Assignor has hereunto signed his/her name to this assignment on the data indicated below.

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evidence to be the person(e) whose name(e) is/are-subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(iee), and that by his/her/their signature(e) on the instrument the person(e), or the entity upon behalf of which the person(e) acted, executed the instrument.

Commission # 1857668
Notary Public - California
Bands Clara County
My Cartyn. Septes Dec 24, 2008

WITNESS my hand and official seal.

Signature of Notary

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		Signature of Notary Bereunto signed his/her name to this assignment on the date indicated below.
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State of	before me,son(s) whose name(s) is/are	Sudhakar Padavala Sudhakar Padavala Personally known to me or proved to me on the basis of satisfactory subscribed to the within instrument and acknowledged to me that he/she/they ity(ies), and that by his/her/their signature(s) on the instrument the packnowledge.

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Signature of Notary

Attorney Docket No. CS-05-01

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IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.

Date:		
	Robert Andrews	
State of		
County of		
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	WITNESS my hand and official seal	
	Signature of Notary	

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IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.

Date:		
	. 	Navindra Yadav
State of		
County of		
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		WITNESS my hand and official seal.
		Signature of Notary
IN TESTIMONY	-	ereunto signed his/her name to this assignment on the date indicated below.
		Shree Murthy
State of		
County of		
On	before me,	
executed the same in h	on(s) whose name(s) is/are s	personally known to me or proved to me on the basis of satisfactory subscribed to the within instrument and acknowledged to me that he/she/they ty(ies), and that by his/her/their signature(s) on the instrument the person(s), or executed the instrument.
		WITNESS my hand and official seal.
		Signature of Notary
IN TESTIMONY	WHEREOF, Assignor has he	ereunto signed his/her name to this assignment on the date indicated below.
Date:	****	Gnanaprakasam Pandian
State of		•
County of		
On	before me,	······································
		personally known to me or proved to me on the basis of satisfactory

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evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal. Signature of Notary SEAL IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below. Date:_ Murall Duvvury State of ___ County of ___ ____ before me, _ personally appeared _ personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal. Signature of Notary IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below. 2/10/2006 before me, ISTN VK personally appeared SUCHAKAR PADAVALA personally knewn to me or the basis of satisfactory evidence to be the personial whose name(a) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/ber/theis authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(a), or the entity upon behalf of which the person(y) acted, executed the instrument. WITNESS my hand and office Signature of Notary -3-

> PATENT REEL: 017591 FRAME: 0496