	-13-1999
3.31.99 REC	
To the Honorable commissioner of Pater Please record the attached original documents 10	1 ,007,54 ,3
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Nitin Karkhanis Richard Livington	Name: Cisco Technology, Inc.
A 1177 1 (2) Comments	Street Address: 170 West Tasman Drive
Additional name(s) of conveying party(ies) attached? Yes X No	City: San Jose
3. Nature of conveyance: X	State: CA Zip: 95134-1706 Additional name(s) & address(es) attached? Yes X No
Execution Date: March 29, 1999	attached: 1 es A No
If this document is being filed together with a new date of the application is: March 29, 1999 A. Patent Application No.(s)	B. Patent No. (s)
Additional numbers attached?	Yes No X
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: A.Sidney Johnston	7. Total fee (37 CFR 3.41)\$40.00 X Enclosed Authorized to be charged to deposit
Street Address: Cesari & McKenna, LLP 30 Rowes Wharf City: Boston State: MA Zip: 02110	account 8. Deposit account no. 03-1237 (Attach duplicate copy of this page if paying by deposit account)
A/08/1999 JSHABAZZ 00000132 09283124 DO NOT	USE THIS SPACE
1 FC:581 40.00 OP	
9. Statement and signature. To the best of my knowledge and belief, the foregoing information copy of the original document. A. Jedney & Kaston	31 march 1999
A. Sidney Johnston, Reg. No. 29,548	Signature Date Total number of pages comprising cover sheet:
, , ,	

PATENT REEL: 9870 FRAME: 0227

ASSIGNMENT

Whereas We, Bernie Paul Pearce, who resides at 306 West Kirkfield Drive, Cary, NC, 27511; Nitin Karkhanis, who resides at 1420 Turk Street, Apt. 702, San Francisco, CA, 94115; and Richard Livingston, who resides at 975 Paullus Drive, Hollister, CA 95023 have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled USING THE DUPLICATE IGNORE TIMER TO DETERMINE WHEN TO UPDATE CACHED RIF, identified by Cesari and McKenna File No. 112025-0113, which application was executed by each of us on:

Bernie Paul Pearce	(Date);
Nitin Karkhanis	29 March 199 (Date);
Richard Livingston	29 March '99 (Date); and

Whereas Cisco Technology, Inc., whose address is 170 West Tasman Drive, Building D, San Jose, CA 95134-1706, and which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited;

Now, Therefore, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

- 1. Assign, transfer, and convey to Assignee our entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part, and Convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications, and said Letters Patent;
- 2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in our names or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title, and interest therein or otherwise as Assignee may direct;

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- 4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications, or patents or any license to use the same or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same Assignee without encumbrance;
- 5. Bind our heirs, legal representatives and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications, and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives, and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples, and other physical exhibits in our control or in the control of our heirs, legal representatives or assigns which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which we have executed this Assignment as an instrument under seal on the dates indicated next to our names.

Date	Bernie Paul Pearce, Inventor
State of North Carolina))gg
County of)ss.)
Pearce, to me known and	y of, 1999, before me appeared Bernie Paul known to me to be the person described in and who executed and he acknowledged the same to be his free act and deed.
	Notary Public
[seal]	

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March 29, 1999 Nitin Karkhanis, Inventor
State of County CAlifornia))ss. County of Santa Clara)
On this 29 day of Ward., 1999, before me appeared Nitin Karkhanis, to me known and known to me to be the person described in and who executed the foregoing instrument, and he acknowledged the same to be his free act and deed.
T. LOPEZ-CELAYA Commission # 1198907 Notary Public - California \$ Santa Clara County My Comm. Expires Oct 18, 2002 Notary Public
[seal]
Date Richard Livingston, Inventor
State of California) State of California) Ss. County of Santa Clava)
On this 29 day of Ward, 1999, before me appeared Richard Livingston, to me known and known to me to be the person described in and who executed the foregoing instrument, and he acknowledged the same to be his free act and deed.
T. LOPEZ-CELAYA Commission # 1198907 Notary Public - California Santa Clara County My Comm. Expires Oct 18, 2002 T. LOPEZ-CELAYA Commission # 1198907 Notary Public Notary Public
[seal]

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RECORDED: 03/31/1999