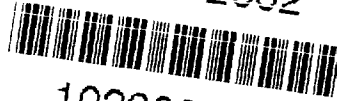


PATENT

12-06-2002



RECORDED 102303304
PATENTS ONLY

LET

12.202

TO: The Commissioner of Patents and Trademarks : Please record the attached original document(s) or copy(ies).

Submission Type		Conveyance Type	
<input type="checkbox"/> New	<input type="checkbox"/> Resubmission (Non- Recordation)	<input checked="" type="checkbox"/> Assignment	<input type="checkbox"/> Security Agreement
Document ID # _____		<input type="checkbox"/> License	<input type="checkbox"/> Change of Name
<input type="checkbox"/> Correction of PTO Error		<input type="checkbox"/> Merger	<input type="checkbox"/> Other _____
Reel # _____ Frame # _____		<i>U.S. Government</i> (For Use ONLY by U.S. Government Agencies)	
<input checked="" type="checkbox"/> Corrective Document		<input type="checkbox"/> Departmental File	<input type="checkbox"/> Secret File
Reel # 8937 Frame # 0754			

Attorney Docket No: 81862P080

Conveying Party (ies) Mark if additional names of conveying parties attached

Name	Execution Date Month Day Year
Name (1st party) <u>David A. Hughes</u>	<u>12.04.1997</u>
Name (2nd party) <u>Madhav V. Marathe</u>	<u>12.04.1997</u>
Name (3rd party) _____	_____
Name (4th party) _____	_____

Receiving Party Mark if additional names of receiving parties attached

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1) <u>Cisco Technology, Inc.</u>			
Name (line 2) <u>a Corporation of California</u>			
Address (line 1) <u>170 West Tasman Drive</u>			
Address (line 2) _____			
Address (line 3) <u>San Jose</u>	<u>California</u>	<u>95134</u>	
City	State/Country	Zip Code	

Domestic Representative Name and Address (Complete only if receiving party is not domiciled in the United States) **Enter for the first Receiving Party only.**

Name _____

Address (line 1) _____

Address (line 2) _____

Address (line 3) _____

Address (line 4) _____

12/05/2002 DBYRNE 00000138 08986211 **FOR OFFICE USE ONLY**

01 FC:8021 40.00 DP

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

Correspondent Name and Address

Area Code and Telephone Number (408) 720-8300

Name Lester J. Vincent

Address (line 1) BLAKELY SOKOLOFF TAYLOR, & ZAFMAN LLP

Address (line 2) 12400 Wilshire Boulevard, Seventh Floor

Address (line 3) _____

Address (line 4) Los Angeles, CA 90025-1030

Pages Enter the total number of pages of the attached conveyance document. # 2

Application Number (s) or Patent Number (s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number (s)

Patent Number (s)

08/986,211 _____

Month Day Year

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Patent Cooperation Treaty (PCT)

Enter PCT application number only if a PCT _____ PCT _____ PCT _____
U.S. Application Number has not been assigned. PCT _____ PCT _____ PCT _____

Number of Properties

Enter the total number of properties involved. # 1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$ 40.00

Method of Payment: Enclosed Deposit Account

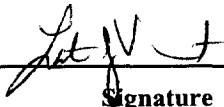
(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: # 02-2666

Authorization to charge additional fees: Yes No

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Lester J. Vincent 31,460  November 25, 2002
Name of Person Signing Registration No. Signature Date

Mail documents to be recorded with required cover sheet(s) information to:
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

02-10-1998



100630158

FORM PTO-1505

(Rev. 6-93)

OMB No. 0651-0011 (exp. 4/94)

Tab settings

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

U.S. PTO

08/986211



12/05/97

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies): David A. Hughes Madhav V. Marathe</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies): Name: <u>Cisco Systems, Inc.</u> Internal Address: _____ _____</p>
<p>3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____</p> <p>Execution Date: <u>12/04/97</u></p>	<p>Street Address: <u>170 West Tasman Drive</u> _____</p> <p>City <u>San Jose</u> State <u>CA</u> ZIP <u>95134</u></p> <p>Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: 12/04/97

A. Patent Application No.(s)	B. Patent No.(s)
------------------------------	------------------

Additional numbers attached? Yes No

<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>Blakely, Sokoloff, Taylor & Zafman LLP</u> Internal Address: _____ Street Address: <u>12400 Wilshire Blvd.</u> <u>7th Floor</u> City: <u>Los Angeles</u> State: <u>CA</u> ZIP: <u>90025</u></p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41).....\$ <u>40.00</u> <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account</p> <p>8. Deposit account number: <u>02-2666</u> (Attach duplicate copy of this page if paying by deposit account)</p>
--	--

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Tarek N. Fahmi - 41,402 [Signature] 12/5/97
Name of Person Signing Signature Date

Total number of pages comprising cover sheet, attachments, and document: 3

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

Attorney Docket No.: 081862.P080

LJV/cem (1/31/96)

08/986211 40.00 UP

PATENT
REEL: 013541 FRAME: 0483

No.: 81862.P080 (For Execution Prior To Filing Patent Application)

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we,
the undersigned, David A. Hughes and Madhav V. Marathe,
hereby sell, assign, and transfer to Cisco Technology Inc.
a corporation of California, having a principal place of business at
170 West Tasman Drive, San Jose, California 95134, ("Assignee"),
and its successors, assigns, and legal representatives, the entire right, title, and interest for the
United States and all foreign countries, in and to any and all improvements that are disclosed in
the application for the United States patent that has been executed by the undersigned prior hereto
or concurrently herewith on the dates indicated below and is entitled

**DYNAMIC, RATE-BASED, WEIGHTED FAIR SCHEDULER WITH EXPLICIT RATE
FEEDBACK OPTION**

and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all
other patent applications that have been or shall be filed in the United States and all foreign
countries on any of said improvements; and in and to all original and reissued patents that have
been or shall be issued in the United States and all foreign countries on said improvements; and in
and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said
improvements in its own name; and that, when requested, without charge to, but at the expense of,
said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the
intent and purpose of this Assignment, the undersigned will execute all divisional, continuing,
substitute, renewal, reissue, and all other patent applications on any and all said improvements;
execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said
Assignee, its successors, assigns, and representatives all facts known to the undersigned relating
to said improvements and the history thereof; and generally assist said Assignee, its successors,
assigns, or representatives in securing and maintaining proper patent protection for said
improvements and for vesting title to said improvements, and all applications for patents and all
patents on said improvements, in said Assignee, its successors, assigns, and legal representatives;
and

covenant with said Assignee, its successors, assigns, and legal representatives that no
assignment, grant, mortgage, license, or other agreement affecting the rights and property herein
conveyed has been made to others by the undersigned, and that full right to convey the same as
herein expressed is possessed by the undersigned.

Each Inventor: Please Sign and Date Below:

<u>Dec 4</u> , 19 <u>97</u> Date	<u>[Signature]</u> David A. Hughes
<u>Dec 4</u> , 19 <u>97</u> Date	<u>[Signature]</u> Madhav V. Marathe
_____, 19____ Date	_____ Name:
_____, 19____ Date	_____ Name:
_____, 19____ Date	_____ Name:
_____, 19____ Date	_____ Name:

**Each Inventor:
Please also list the
date that you signed
the accompanying
DECLARATION AND
POWER OF
ATTORNEY:**

<u>Dec 4</u> , 19 <u>97</u> Date
<u>Dec 4</u> , 19 <u>97</u> Date
_____, 19____ Date
_____, 19____ Date
_____, 19____ Date
_____, 19____ Date

State of: _____ }
County of: _____ }

Assignment Document Return Address:
SS. BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
12400 Wilshire Blvd., Seventh Floor
Los Angeles, CA 90025-1026
(408) 720-8598

On this _____ day of _____ 19____, before me, _____,
the undersigned Notary Public, personally appeared _____
[] personally known to me [] proved to me on the basis of satisfactory evidence to be the
person(s) whose name(s) _____ subscribed to the within instrument, and acknowledged that
executed it.

WITNESS my hand and official seal.

Notary's Signature

No.: 81862.P080 (For Execution Prior To Filing Patent Application)

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we,
the undersigned, David A. Hughes and Madhav V. Marathe,
hereby sell, assign, and transfer to Cisco Technology Inc.
a corporation of California, having a principal place of business at
170 West Tasman Drive, San Jose, California 95134, ("Assignee"),
and its successors, assigns, and legal representatives, the entire right, title, and interest for the
United States and all foreign countries, in and to any and all improvements that are disclosed in
the application for the United States patent that has been executed by the undersigned prior hereto
or concurrently herewith on the dates indicated below and is entitled

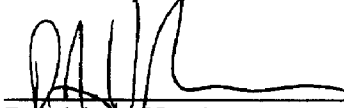
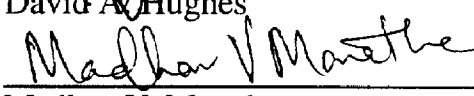
**DYNAMIC, RATE-BASED, WEIGHTED FAIR SCHEDULER WITH EXPLICIT RATE
FEEDBACK OPTION**

and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all
other patent applications that have been or shall be filed in the United States and all foreign
countries on any of said improvements; and in and to all original and reissued patents that have
been or shall be issued in the United States and all foreign countries on said improvements; and in
and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said
improvements in its own name; and that, when requested, without charge to, but at the expense of,
said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the
intent and purpose of this Assignment, the undersigned will execute all divisional, continuing,
substitute, renewal, reissue, and all other patent applications on any and all said improvements;
execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said
Assignee, its successors, assigns, and representatives all facts known to the undersigned relating
to said improvements and the history thereof; and generally assist said Assignee, its successors,
assigns, or representatives in securing and maintaining proper patent protection for said
improvements and for vesting title to said improvements, and all applications for patents and all
patents on said improvements, in said Assignee, its successors, assigns, and legal representatives;
and

covenant with said Assignee, its successors, assigns, and legal representatives that no
assignment, grant, mortgage, license, or other agreement affecting the rights and property herein
conveyed has been made to others by the undersigned, and that full right to convey the same as
herein expressed is possessed by the undersigned.

Each Inventor: Please Sign and Date Below:

Dec 4, 1997 Date	 David A. Hughes
Dec 4, 1997 Date	 Madhav V. Marathe
_____, 19____ Date	_____ Name:
_____, 19____ Date	_____ Name:
_____, 19____ Date	_____ Name:
_____, 19____ Date	_____ Name:

**Each Inventor:
Please also list the
date that you signed
the accompanying
DECLARATION AND
POWER OF
ATTORNEY:**

Dec 4, 1997 Date
Dec 4, 1997 Date
_____, 19____ Date
_____, 19____ Date
_____, 19____ Date
_____, 19____ Date

State of: _____ }
County of: _____ }

Assignment Document Return Address:
SS. BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
12400 Wilshire Blvd., Seventh Floor
Los Angeles, CA 90025-1026
(408) 720-8598

On this _____ day of _____, 19____, before me, _____,
the undersigned Notary Public, personally appeared _____
[] personally known to me [] proved to me on the basis of satisfactory evidence to be the
person(s) whose name(s) _____ subscribed to the within instrument, and acknowledged that
executed it.

WITNESS my hand and official seal.

Notary's Signature