11-27-1998 **FORM PTO - 1595** U.S. DEPARTMENT OF COMMERCE 7-30-93 EET Patent and Trademark Office 100906656 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Douglas E. O'Neil **HEWLETT-PACKARD COMPANY** Robert M. McGuire Legal Department, M/S 20BN 3000 Hanover Street Palo Alto, CA 94304 Additional name(s) of conveying party(ies) attached? No Additional name(s) & address(es) attached? No 3. Nature of Conveyance: X Assignment Merger Security Agreement Change of Name _ Other _ Execution Date(s): 09/17/98 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: _ A. Patent Application No.(s) B. Patent No.(s) Ser. No.: 09/160,054 Date Filed: 09/24/98 Additional numbers attached? NO 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 1 concerning document should be mailed: Jerome Dechant RE: 10972033-1 7. Total Fee (37 CFR 3.41): \$40.00 **HEWLETT-PACKARD COMPANY** __ Enclosed Legal Department, IP Section X Authorization to be charged to deposit account 19111 Pruneridge Ave., M/S 44L18 8. Deposit Account Number: 08-2025 (attach duplicate copy of this page if paying by deposit Cupertino, CA 95014-0795 account.) 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. November 18, 1998 Jerome Dechant Signature Date Name of Person Signing Total number of pages including cover sheet, attachments and documents: 3 OMB No. 0651-0011 (exp.4/94) Do not detach this portion

09160054 Assistant Commissioner for Patents
Box Assignment
Washington, D.C. 20231

Mail documents to be recorded with required cover sheet information to:

00000152 082025

40.00 CH

1/27/1998 SBURNS

FC:581

PATENT APPLICATION

HEWLETT-PACKARD COMPANY Legal Department, 20BN P. O. Box 10301 Palo Alto, California 94303-0890

KISIZIINE WYSIE BISCHII

ATTORNEY DOCKET NO.: 10972033-1

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD COMPANY, a Delaware corporation having its principal place of business in Palo Alto, California, (hereinafter HP), in furtherance of my/our obligations to HP, and do hereby assign and transfer to HP, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Letters Patent of the United States entitled:

right of priority, in, to and under an application for Letters Patent of the United States entitled: RUNTIME DETECTION OF NETWORK LOOPS
Filing date: 09/24/98 Serial No.: 09/160,054 and the invention(s) and improvement(s) set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and renewals of and substitutes for said application for said Letters Patent, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefor; and any reissues, or reexaminations, or extensions of said Letters Patent.
I/we additionally authorize HP to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by HP, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, sale and transfer not been made;
AND I/we hereby covenant 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, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent, to HP, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to HP, or to its nominee, all known facts respecting said invention(s) or improvement(s), said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, C-I-P's, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid HP, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvement(s) in any and all countries provided the expenses which may be incurred by me/us in lending such cooperation and assistance are paid by HP;
AND I/we hereby 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 on applications as aforesaid, to issue to HP, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.
I/we further authorize and direct HP attorneys to insert the serial number and filing date of said application now identified by the attorney docket number and title set forth above as soon as the same shall have been made known to them by the United States Patent and Trademark Office.
IN WITNESS WHEREOF, I/we hereunto set my/our hand(s) and seal(s):
Doub I Civ. Date Assignment Signed: * 9/17/98 Inventor's Signature (Seal)
Inventor's Typed Name: Douglas E. O'Neil Date Application Signed: 9/17/98
State of California) ss.: County of Placer) ss.:
Before me this 17 day of Stat: 1998 personally appeared Douglas Meil who is personally known or arroyed
to me on the basis of satisfactory evidence to be the person who acknowledged the foregoing instrument of assignment to be his/her free act and deed
Gristine Marie Bright
THERTHE MARKE BRIGHT WA COURT Proper (No.co. Street Stree
T CHARLES A LICENSTALL CO.

PATENT REEL: 9599 FRAME: 0114

page 1 of 2

PATENT APPLICATION

ATTORNEY DOCKET NO. 10972033-1

HEWLETT-PACKARD COMPANY Legal Department, 20BN P. O. Box 10301 Palo Alto, California 94303-0890

ASSIGNMENT OF PATENT APPLICATION (cont.)

$\sim 10^{-1}$		
EOF. I/w/e hevelunte set/mv/o	ir hand(s) and seal(s).	
rehalf from	Date Assignment Signed:	9-17-98
,	J J	
bert Michael McGuire	Date Application Signed: <u>~</u>	9-17-98
L)		
) ss.:)	_	
Sept- 1998, personally app	eared Robert M. II	MITWIE who is personally known or proved
ory evidence to be the person who	acknowledged the foregoing inst	trument of assignment to be his/her free act and deed.
		Kristine Marie Bright
KRISTINE MARIE BRIGHT Commission # 1131645 Notary Public — California Placer County My Comm. Expires Mar 27, 2001		Notary Public My commission expire THE MARIE BRIGH
	Date Assignment Signed:	
	Date Application Signed:	
)		
)) ss.:)		
)	eared acknowledged the foregoing inst	who is personally known or proved rument of assignment to be his/her free act and deed.
)	eared acknowledged the foregoing inst	who is personally known or proved rument of assignment to be his/her free act and deed. Notary Public My commission expires:
)	eared acknowledged the foregoing inst Date Assignment Signed:	Notary Public
)	acknowledged the foregoing inst	Notary Public
)	acknowledged the foregoing inst Date Assignment Signed:	Notary Public
)	acknowledged the foregoing inst Date Assignment Signed:	Notary Public
), personally appropriet ory evidence to be the person who a	Date Assignment Signed: Date Application Signed:	Notary Public My commission expires: who is personally known or proved
), personally appropriet ory evidence to be the person who a	Date Assignment Signed: Date Application Signed:	Notary Public My commission expires:
	bert Michael McGuire Ss.: Suff-1998, personally applored evidence to be the person who KRISTINE MARIE BRIGHT	Sept-1998, personally appeared Robert M. Interpretation of evidence to be the person who acknowledged the foregoing instruction of 1131645 Notony Public — Colifornia Placer County My Comm. Expires Mar 27, 2001 Date Assignment Signed:

(Use Page Three For Additional Inventor(s) Signature(s))

RECORDED: 11/23/1998

Page 2 of 2

PATENT REEL: 9599 FRAME: 0115