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Attorney Docket No. 10980381-1

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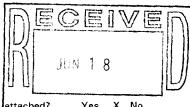
Thomas V. Spencer

Robert J. Horning

2. Name and address of receiving party(ies): **HEWLETT-PACKARD COMPANY**

Legal Department, M/S 20BN 3000 Hanover Street

Palo Alto, CA 94304



Additional name(s) of conveying party(ies) attachedYes _X_ No	Additional name(s) & address(es) attached?Yes _X_ No			
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A. Patent Application No.(s)	B. Patent No.(s)			
Serial No. 09/232,293 Date Filed: 1/15/99				
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5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1			
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PATENT REEL: 010042 FRAME: 0234

PATENT APPLICATION

ATTORNEY DOCKET NO. 10980381-1

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

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:

System And Method For Managing Data In An I/O C	ache	
Filing date: 1/15/99	Serial No.:	09/232,293
and the invention(s) and improvement(s) set continuations-in-part (C-I-P's), divisionals, and rene Letters Patent, and any and all Letters Patent of the may be granted thereon or therefor; and any reissupatent.	wals of and sub United States a	estitutes for said application for said nd of countries foreign thereto which
I/we additionally authorize HP to file applications be held and enjoyed by HP, its successors, assigns, the term or terms for which said Letters Patent refully and entirely as the same would have been he transfer not been made;	, nominees or leg spectively may b	gal representatives, to the full end of be granted, reissued or extended, as
AND I/we hereby covenant that I/we have full righthat I/we have not executed and will not execute a covenant and agree that I/we will, each time a requeliver all such papers as may be necessary or improvement(s), said application and said Letters I legal representatives, and I/we agree to communicat said invention(s) or improvement(s), said application proceedings, to sign all lawful papers, to execute a reissue and foreign applications, to make all rig everything possible to aid HP, its successors, assigned ender the interest of their own benefit, proper patent any and all countries provided the expenses which in and assistance are paid by HP;	any agreement in uest is made, and desirable to perfect to HP, in e to HP, or to its on and said Le all disclaimers and htful oaths and protection for si	n conflict herewith, and I/we further did without undue delay, execute and ect the title to said invention(s) or its successors, assigns, nominees or nominee, all known facts respecting ters Patent, to testify in any legal divisionals, continuations, C-I-P's, declarations, and generally to do d legal representatives to obtain and aid invention(s) or improvement(s) in
AND I/we hereby authorize and request the Cor States and any official of any country or countries f patents on applications as aforesaid, to issue to HP, and all Letters Patent for said invention(s) or improve United States which may be issued and granted accordance with the terms of this assignment.	oreign to the Ur as assignee of t vement(s), includ	nited States whose duty it is to issue the entire right, title and interest, any ling any and all Letters Patent of the
I/we further authorize and direct HP attorneys application now identified by the attorney docket no shall have been made known to them by the United S	umber and title :	set forth above as soon as the same
Inventor's Signature (Seal)	e Assignment Signed	ı: 1/14/99
Inventor's Typed Name: Thomas V Spencer	Date Applicat	on Signed:
State of Colorado)		, , , , , ,
) ss.: County of Larimer		
Before me this Aday of Lun, 1994, personal personally known or proved to me on the basis of satisfactor instrument or assignment to be his/her free act and deed.	ly appeared <u>The</u> ry evidence to be t	he person who acknowledged the foregoing
		My commission expires: My Commission Expires Jan 30, 2000

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

PATENT^{of}

REEL: 010042 FRAME: 0235

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PATEN	APPLICATION
ATTORNEY DOCKET NO.	10980381-1

ASSIGNMENT OF PATENT APPLICATION (cont.)

Inventor's Signature (Seal) Inventor's Typed Name: Robert J Horning State of Colorado) ss.: County of Larimer Before me this 3 day of	
State of Colorado) ss.: County of Larimer Before me this 13Hday of 10411. 1999, personally appeared to be the person who a instrument of assignment to be his/her free act and deed. Date Assignment Signed: Inventor's Signature (Seal) Inventor's Typed Name: Date Application Signed: State of) ss.: County of Before me this day of, personally appeared personally known or proved to me on the basis of satisfactory evidence to be the person who are instrument of assignment to be his/her free act and deed.	199
State of Colorado) ss.: County of Larimer Before me this 13Hday of 10411. 1999, personally appeared to be the person who a instrument of assignment to be his/her free act and deed. Date Assignment Signed: Inventor's Signature (Seal) Inventor's Typed Name: Date Application Signed: State of) ss.: County of Before me this day of, personally appeared personally known or proved to me on the basis of satisfactory evidence to be the person who are instrument of assignment to be his/her free act and deed.	113/59
Before me this 3 day of 3 2.11. 1999, personally appeared to be the person who a instrument of assignment to be his/her free act and deed. Date Assignment Signed: Inventor's Signature (Seal) Inventor's Typed Name: Date Application Signed: State of Defore me thisday of, personally appeared personally known or proved to me on the basis of satisfactory evidence to be the person who as instrument of assignment to be his/her free act and deed.	,
Date Assignment Signed: Date Assignment Signed: Date Application Signed:	
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County of) ss.: Before me this day of, personally appeared personally known or proved to me on the basis of satisfactory evidence to be the person who are instrument of assignment to be his/her free act and deed.	
Before me this day of, personally appeared personally known or proved to me on the basis of satisfactory evidence to be the person who are instrument of assignment to be his/her free act and deed.	
personally known or proved to me on the basis of satisfactory evidence to be the person who as instrument of assignment to be his/her free act and deed.	
Notary Public	who is cknowledged the foregoing
My commission	expires:
Date Assignment Signed:	
Inventor's Signature (Seal)	
Inventor's Typed Name: Date Application Signed:	· VALUE AND A STATE OF THE STAT
State of)	
County of) ss.:	
Before me this day of, personally appeared personally known or proved to me on the basis of satisfactory evidence to be the person who ac instrument of assignment to be his/her free act and deed.	who is cknowledged the foregoing
Notary Public My commission e	>xpires:

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

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