10 10 00	ON FORM CO	12-30-1998	rademark Office		
1. Name of conveying party(ies): Clayton Louis Holstun, 11/3/98 William Edward Bland, 11/3/98 Ian Nigel Kirkwood, 11/4/98	L 3	100931593 EWLETT-PACKARD COMPANY egal Department, M/S 20BN 000 Hanover Street alo Alto, CA 94304	s):		
Additional name(s) of conveying party(ies) attachedYes	X No Addit	onal name(s) & address(es) attached?	Yes _X_ No		
3. Nature of Conveyance:					
X Assignment	Merger	Change of Name	,		
Security Agreement	Other				
Execution Date(s): 11/3/98; 11/3/98; 11/4/98					
4. Application number(s) or patent number(s):					
If this document is being filed together with a ne	w application,	execution date of the application	n is:		
A. Patent Application No.(s)	B. Pa	tent No.(s)			
Serial No.: 09/186,746 Date Filed: Nov 5, 1	998				
Additional numbers attached? NO					
5. Name and address of party to whom correspondencerning document should be mailed:	ndence 6. To	tal number of applications and pa	atents involved: 1		
Records Manager HEWLETT-PACKARD COMPANY Legal Dept. MS 66-838 16399 W. Bernardo Drive San Diego, CA 92127	7. То	tal Fee (37 CFR 3.41): \$40 Enclosed X Authorization to be charged			
2/23/1998 JSHABAZZ 00000018 082025 09186746	8. De	eposit Account Number: 08-20	25		
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9. Statement and signature. To the nest of my knowledge and belief, the fore true copy of the original document.	egoing informa	tion is true and correct and any a	nttached copy is a		
Cynthia Hupper Name of Person Signing Cynthia Hupper Signature Dec 09, 1998 Date					
Total number of pages including cover sheet, attachments, and document: 3					
OMB No 0651-0011 (exp. 4/94)					
Do Not detach this portion Mail document to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignment Washington, D.C. 20231					

Rev 11/98 (Repdasgr)

PATENT REEL: 9663 FRAME: 0765 HEWLETT-PACKARD COMPANY Legal Department, 20BN P. O. Box 10301 Palo Alto, California 94303-0890

PATENT APPLICATION

ATTORNEY DOCKET NO.: 10980440-1

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:

FRACTIONAL DOT COLUMN CORRECTION FOR BETTER PEN-TO-PEN ALIGNMENT DURING **PRINTING**

	5 Nov.		Serial No.: 09/186,746
and the inve	ention(s) and	improvement(s)	set forth therein, and any and all continuations, continuations-in-part (C-I-P's),
divisionals,	and renewal	s of and substitu	ites for said application for said Letters Patent, and any and all Letters Patent of the
	es and of counts of said Let		ereto which may be granted thereon or therefor; and any reissues, or reexaminations,

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 Clay to Louis Helto Inventor's Signature (Seal)	hand(s) and seal(s): Date Assignment Signed: 11/3/98
nventor's Typed Name: Clayton Louis Holstun	Date Application Signed: 11/3/98
State of same same state of same same state of same same state of same same same state of same same same same same same same same	redwho is personally known or proved knowledged the foregoing instrument of assignment to be his/her-free act and deed.
CYNTHIA L. HUPPER Commission # 1147485 Notary Public - California San Diego County My Comm. Expires Jul 19, 2001 (Use Page Two Fo	Notary Public My commission expires: -7

page 1 of 2

PATENT APPLICATION

ATTORNEY DOCKET NO. 10980440-1

ASSIGNMENT OF PATENT APPLICATION (cont.)

IN WITNESS WHEREOF, I we hereunto set my/o	our hand(s) and seal(s):
IN WITNESS WHEREOF, I we hereunto set my/o	Date Assignment Signed:
Inventor's Signature (Seal)	
Inventor's Typed Name: William Edward Bland	Date Application Signed:
State of Sect. From A.)	
County of The Transfer of Section (Section 1) ss.:	
Before me thisday of, personally ap to me on the basis of satisfactory evidence to be the person who	ppeared <u>FORM FORM FORM AND AND Sepersonally</u> known or proved o acknowledged the foregoing instrument of assignment to be his/her-free act and deed.
CYNTHIA L. HUPPER Commission # 1147485 Notary Public - California \$ San Diego County My Comm Expires Lui 19 2001	Notary Public My commission expires:
Inventor's Signature (Seal)	Date Assignment Signed:
Inventor's Typed Name: Ian Nigel Kirkwood	Date Application Signed: (1984)
State of (Color France) ss.:	
Before me thisday of//	o acknowledged the foregoing instrument of assignment to be his/her free act and deed. Notary Public My commission expires:
Inventor's Signature (Seal)	Date Assignment Signed:
Inventor's Typed Name:	Date Application Signed:
State of)	
County of } ss.:	
Before me this day of, personally ap to me on the basis of satisfactory evidence to be the person who	opeared who is personally known or proved o acknowledged the foregoing instrument of assignment to be his/her free act and deed.
	Notary Public My commission expires:

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

Page 2 of 2

PATENT REEL: 9663 FRAME: 0767