FORM PTO-1595 1-31-92	03-28- 1 102402	Patent and Trademark Office
1. Name of conveying party(ies): Frederick A. Perner David H. McIntyre Jonathan Jedwab Anthony P. Holden	3-26-03	2. Name and address of receiving party(ies): HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. Box 272400 Fort Collins, Colorado 80527-2400
Additional name(s) of conveying party(ies) a 3. Nature of Conveyance:	ttachedYes _X No	Additional name(s) & address(es) attached?
X Assignment	Merger	Change of Name
Security Agreement	Other	
Execution Date(s): Respectively;11	-15-2002,11-15-2002	,03-17-2003,11-18-2002
4. Application number(s) or patent i	number(s):	
If this document is being filed toge	ther with a new applic	cation, execution date of the application is:
A. Patent Application No.(s)		B. Patent No.(s)
Application No.: 10/218,892	Date Filed: 08	-14-2002
Confirmation No.: 3438	Additional numbe	ers attached? NO
concerning document should be mailed: Records Manager Intellectual Property Administration HEWLETT-PACKARD COMPANY		6. Total number of applications and patents involved: 1
		7. Total Fee (37 CFR 3.41): \$40.00 Enclosed
P.O. Box 272400 Fort Collins, Colorado 80527-2	400	X Authorization to be charged to deposit account.
3/27/2003 TDIAZ1 00000072 082025 102	18892	8. Deposit Account Number: 08-2025
1 FC:802 40.00 CH	DO NOT USE	THIS SPACE
9. Statement and signature. To the best of my knowledge and true copy of the original document.		nformation is true and correct and any attached copy is a
Marci Santillanes	marie 1	Sautulares Mar 21, 2003
Name of Person Signing	Signature	Date
Total	number of pages includ	ling cover sheet, attachments, and document: 5
OMB No. 0651-0011 (exp. 4/94)		
		th this portion
Mail document to be recorded with	Commissio Box A	information to: oner for Patents ssignment on, D.C. 20231

PATENT REEL: 013886 FRAME: 0826

PATENT APPLICATION ATTORNEY DOCKET NO. 10014216 -1

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD

(hereinafter HP), in furtherance of my/our obligation	rincipal place of business in Palo Alto, California, ns to HP, and do hereby assign and transfer to HP, and interest, including the right of priority, in, to and
Systems And Methods For Reducing The Effect Of I	Noise While Reading Data In Series From Memory
Filing date: 08-14-2002	Application No.: 10/218,892
continuations-in-part (C-I-P's), divisionals, and rene Letters Patent, and any and all Letters Patent of	forth therein, and any and all continuations, wals of and substitutes for said application for said the United States and of countries foreign thereto reissues, or reexaminations, or extensions of said
to be held and enjoyed by HP, its successors, assign of the term or terms for which said Letters Patent	s in my/our name for Letters Patent in any country, ns, nominees or legal representatives, to the full end respectively may be granted, reissued or extended, neld and enjoyed by me/us had this assignment, and
and that I/we have not executed and will not execute the covenant and agree that I/we will, each to execute and deliver all such papers as may be invention(s) or improvement(s), said application and nominees or legal representatives, and I/we agree to facts respecting said invention(s) or improvement(s in any legal proceedings, to sign all lawful paracontinuations, C-I-P's, reissue and foreign applications generally to do everything possible to aid Historians and enforce, for its or to execute the coverage of the coverag	right to convey the entire interest herein assigned, cute any agreement in conflict herewith, and I/we ime a request is made, and without undue delay, necessary or desirable to perfect the title to said said Letters Patent, to HP, its successors, assigns, to communicate to HP, or to its nominee, all known and application and said Letters Patent, to testify pers, to execute all disclaimers and divisionals, ons, to make all rightful oaths and declarations, and P, its successors, assigns, nominees and legal heir own benefit, proper patent protection for said its provided the expenses which may be incurred by the paid by HP;
States and any official of any country or countries f patents on applications as aforesaid, to issue to H any and all Letters Patent for said invention(s) or im	nmissioner of Patents and Trademarks of the United oreign to the United States whose duty it is to issue P, as assignee of the entire right, title and interest, provement(s), including any and all Letters Patent of ed on or as a result of the application aforesaid, in
	s to insert the serial number and filing date of said umber and title set forth above as soon as the same States Patent and Trademark Office.
IN WITNESS WHEREOF, I/we hereunto set my/o	Date Application Signed: Nov 15, 2002
Inventor's Typed Name: <u>Frederick A. Perner</u>	Date Application Signed: New 15, 2002
State of)	•
County of)	
Before me this day of, persona	Ily appeared Frederick A. Perner who
is personally known or proved to me on the basis of satisfacto instrument of assignment to be his/her free act and deed.	ory evidence to be the person who acknowledged the foregoing
	Notary Public

PATENT1 of 3

REEL: 013886 FRAME: 0827

My commission expires:

PATENT APPLICATION ATTORNEY DOCKET NO. 10014216 -1

ASSIGNMENT OF PATENT APPLICATION (cont.)

IN WITNESS WHEREOF, I we hereun	
Lavidle Meg	Date Application Signed November 15, 2002 Date Application Signed November 15, 2002
Inventor's Signature (Seal)	A lave la Koma
Inventor's Typed Name: David H. McIntyre	Date Application Signed/UNEXW1/3, MUL
State of)) ss.:
County of)	, 33
Before me this day of is personally known or proved to me on the instrument of assignment to be his/her free ac	, personally appeared <u>David H. McIntyre</u> who basis of satisfactory evidence to be the person who acknowledged the foregoing t and deed.
	Notary Public
	My commission expires:
	Date Assignment Signed:
Inventor's Signature (Seal)	
Inventor's Typed Name: Jonathan Jedwab	Date Application Signed:
State of)) ss.:
County of)	
Before me this day of	, personally appeared <u>Jonathan Jedwab</u> who
	basis of satisfactory evidence to be the person who acknowledged the foregoing
	Notary Public
	My commission expires:
nventor's Signature (Seal)	Date Assignment Signed: November 18, 2002
nventor's Typed Name: Anthony P. Holden	Date Application Signed: November 18, 2002
State of)	
County of)	SS.:
Before me this day of	, personally appeared <u>Anthony P. Holden</u> who
s personally known or proved to me on the lastrument of assignment to be his/her free act	basis of satisfactory evidence to be the person who acknowledged the foregoing and deed.
	Notary Public
	My commission expires:

Page 2 of 3

When recorded please return to:
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400

Fort Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. 10014216 -1

ASSIGNMENT OF PATENT APPLICATION (cont.)

	Date Assignment Signed:
Inventor's Signature (Seal)	
Inventor's Typed Name: David H. McInty	re Date Application Signed:
State of)) ss.:
County of)
Potoro mo this day of	personally appeared. Devid II. Malatana
is personally known or proved to me on	, personally appeared <u>David H. McIntyre</u> who the basis of satisfactory evidence to be the person who acknowledged the foregoing
instrument of assignment to be his/her fre	
	Notary Public
	My commission expires:
K K a 1	D
Inventor's Signature (Seal)	Date Assignment Signed: 17 Mach 2003
inventor's Signature (Seal)	
nventor's Typed Name: Jonathan Jedwa	b Date Application Signed: 17 March 7003
State of Vicinais)
out of Viginiz) ss.:
State of Virginia County of City of Richmon	
Refere me this 17 Hay of 240	2003 personally appeared to the leduch with
s personally known or proved to me on	the basis of satisfactory evidence to be the person who acknowledged the foregoing
nstrument of assignment to be his/her fre	e act and deed.
	Varier m. Teache
	Notary Public
	My commission expires:
	Notary Public My commission expires: 2/28/2005
	Date Assignment Signed:
nventor's Signature (Seal)	Date Assignment Signed:
nventor's Typed Name: Anthony P. Holde	en Date Application Signed:
nventor's Typed Name: Anthony P. Holde	Date Application Signed:
nventor's Signature (Seal) nventor's Typed Name: Anthony P. Holde state of County of	en Date Application Signed:
nventor's Typed Name: Anthony P. Holde	Date Application Signed:
nventor's Typed Name: Anthony P. Holde State of County of Before me this day of	Date Application Signed:)) ss.:) , personally appeared <u>Anthony P. Holden</u> who
itate of County of Before me this day of s personally known or proved to me on	Date Application Signed:)) ss.:) , personally appeared Anthony P. Holden who the basis of satisfactory evidence to be the person who acknowledged the foregoing
tate of Before me this day of personally known or proved to me on	Date Application Signed:)) ss.:) , personally appeared Anthony P. Holden who the basis of satisfactory evidence to be the person who acknowledged the foregoing
nventor's Typed Name: Anthony P. Holde State of County of Before me this day of	Date Application Signed:)) ss.:) , personally appeared Anthony P. Holden who the basis of satisfactory evidence to be the person who acknowledged the foregoing

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

Page 3 of 3

PATENT REEL: 013886 FRAME: 0829

RECORDED: 03/26/2003