FORM DTO 4505	-	WI		
FORM PTO-1595 1-31-92		U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office		
RECORDATION FORM CO				
	PATENTS (ONLY Attorney Docket No. 10014206-1		
Name of conveying party(ies):		2. Name and address of receiving party(ies):		
BRADENBERGER, Sarah Morris		HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.		
MUNDEN, Terrel		20555 SH 249 Houston, TX 77070		
JEDWAB, Jonathan		Houston, 1X 77070		
DAVIS, James A.				
BANKS, David				
		·		
Additional name(s) of conveying party(ies) attached _	Vas X No	Additional name(s) & address(es) attached?Yes _X_ No		
3. Nature of Conveyance:		Additional name(s) & address(es) attached:		
	Name	01		
X Assignment	Merger	Change of Name		
Security Agreement	Other			
 Execution Date(s): 11/26/03; 12/17/03; 11	1/27/03: 1/28 ₀	/04 12/4/03		
4. Application number(s) or patent number(
If this document is being filed together wit	h a new annli	cation, execution date of the application is:		
	a man appin	•		
A. Patent Application No.(s)		B. Patent No.(s)		
Application No.: 10/767,188	Date Filed: 1/2	29/2004		
Confirmation No.: 4654 Adv	ditional numbe	ers attached? NO		
Name and address of party to whom cor concerning document should be mailed:	respondence	6. Total number of applications and patents involved: 1		
		7. Total Fee (37 CFR 3.41): \$40.00		
Intellectual Property Administration				
HEWLETT-PACKARD COMPANY P.O. Box 272400		Enclosed		
Fort Collins, Colorado 80527-2400		X Authorization to be charged to deposit account		
		8. Deposit Account Number: 08-2025		
	DO NOT USE	THIS SPACE		
Statement and signature.				
*	he foregoina iu	nformation is true and correct and any attached copy is a		
true copy of the original document.	ic reregeing in	The mattern is true and correct and any attached copy is a		
Carrio MoKovlov	200 - 1	116.0		
Carrie McKerley Name of Person Signing	<u>WULLER</u>	Aug 16, 2004 Date		
· -	of pages includ	ing cover sheet, attachments, and document: 6		
OMB No. 0651-0011 (exp. 4/94)	- pages includ.	ing cover sheet, attachments, and document		
(Mp. 1707)	Do Not detac	h this portion		
Mail document to be recorded with required cover sheet information to:				
		ent Recordation Services tent and Trademark Office		
Direct		Sox 1450		
Alexandria, VA 22313-1450				

HEWLETT-PACKARD COMPANY Intellectual Property Administrator P. O. Box 272400 Fort Collins, Colorado 80527-2400 PATENT APPLICATION

ATTORNEY DOCKET NO. 10014206-1

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPDC), in furtherance of my/our obligations to the Hewlett-Packard Company and its subsidiaries and affiliates, and do hereby assign and transfer to HPDC, 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 CONFIGURING A SOLID-STATE STORAGE DEVICE WITH ERROR CORRECTION CODING Application No.: 10/767.188 Filing date: January 29, 2004 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 HPDC to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by HPDC, 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, 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 HPDC, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to HPDC, 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 passible to aid HPDC, its successors, assigns, nominees and legal representatives to obtain everything possible to aid HPDC, 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 HPDC;

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 HPDC, 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 the attorneys of record to insert the serial number and filing date of

same shall have been made ki	d by the attorner nown to them by	ey docket number and title set forth aby the United States Patent and Tradema	oove as soon as the irk Office.
IN WITNESS WHEREOF, I	/wie hereunto se	et my/our hand(s) and seal(s):	
Sarah Moris Br	enctal egg	Date Assignment Signed: 11-26-03	
Inventor's Signature (Seal)	9		
Inventor's Typed Name: Sarah Brade	nberger 😂	Date Application Signed: 1/- 2 6	-03
State of)		
County of) ss.:		
oblinity of	,		
Before me this day of	,	personally appeared <u>Sarah Bradenberger</u>	who is
personally known or proved to me instrument of assignment to be his/he	on the basis of sa r free act and deed.	tisfactory evidence to be the person who ackn	lowledged the foregoing
		Notary Public	
		My commission exp	ires:

HEWLETT-PACKARD COMPANY Intellectual Property Administrator P. O. Box 272400 Fort Collins, Colorado 80527-2400 PATENT APPLICATION

ATTORNEY DOCKET NO. 10014206-1

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPDC), in furtherance of my/our obligations to the Hewlett-Packard Company and its subsidiaries and affiliates, and do hereby assign and transfer to HPDC, 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 CONFIGURING A SOLID-STATE STORAGE DEVICE WITH ERROR CORRECTION CODING Application No.: 10,767,188 Filing date: January 29, 2004 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 HPDC to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by HPDC, 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, 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 HPDC, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to HPDC, 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 HPDC, 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 HPDC; 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 HPDC, 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 the attorneys of record 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): ______Date Assignment Signed: 72/15/03 Inventor's Signature (Seal) Inventor's Typed Name: Terrel Munden _____ Date Application Signed: State of Luano County of Ada Before me this 17 day of No. 2003, personally applied Terrel Munden who is personally known or proved to me on the basis of satisfactory enders to be the person who acknowledged the foregoing instrument of assignment to be his/her free act and deed. No. 2003 Personally Applied Notary Public My commission expires: 3/24/09 Idaho State of

(Use Page Two For Additional Inwayors Abilin Qure(s)

PATENATe 1 of 1

Rev 10/03 (Assign)

REEL: 015063 FRAME: 0245

HEWLETT-PACKARD COMPANY Intellectual Property Administrator P. O. Box 272400 Fort Collins, Colorado 80527-2400 PATENT APPLICATION

ATTORNEY DOCKET NO. 10014206-1

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPDC), in furtherance of my/our obligations to the Hewlett-Packard Company and its subsidiaries and affiliates, and do hereby assign and transfer to HPDC, 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:

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 HPDC to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by HPDC, 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, 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 HPDC, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to HPDC, 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 HPDC, 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 HPDC;

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 HPDC, 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 the attorneys of record 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):

నగాములు, we harean	Date Assignment Signed: ユュールシャールションで含
Inventor's Signature (Seal)	
Inventor's Typed Name: <u>Jonathan Jedwab</u>	Date Application Signed: 27 November 2003
8-200 - NOC	
State of 3 C.) County of VAYY COUVER)	
personally known or proved to me on the basis	לכטנ personally appeared <u>Jonathan Jedwab</u> who is of satisfactory evidence to be the person who acknowledged the foregoing
instrument of assignment to be his/her free act and	P.M. Manaston Notary Public Notary Public
5 5 - 4 - cm c 10	My commission expires: A O A R Y P F C P
#3 2440 Venoous	Sest Hastings Street

gn) (Use Page Two For Additional Rivertor(s) Signature(s)

PATENHATGe 1 of 1

REEL: 015063 FRAME: 0246

HEWLETT-PACKARD COMPANY Intellectual Property Administrator P. O. Box 272400 Fort Collins, Colorado 80527-2400 PATENT APPLICATION

ATTORNEY DOCKET NO. 10014206-1

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPDC), in furtherance of my/our obligations to the Hewlett-Packard Company and its subsidiaries and affiliates, and do hereby assign and transfer to HPDC, 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:

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 CONFIGURING A SOLID-STATE STORAGE DEVICE WITH ERROR CORRECTION CODING Application No.: 10/767,188 Filing date: January 29, 2004 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 HPDC to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by HPDC, 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, 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 HPDC, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to HPDC, 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 HPDC, 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 HPDC; 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 HPDC, 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 the attorneys of record 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. WITNESS WHEREOF, I/we hereunto set my/our hand(s) and seal(s): _____Date Assignment Signed:___ Inventor's Signature (Sea) Inventor's Typed Name: James Davis _____ Date Application Signed:__ State of 👍 Virginia Before me this 28 day of January 2004, personally appeared James Davis who is personally known or proved 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.

Rev 10/03 (Assign)

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

PATENate 1 of 1

REEL: 015063 FRAME: 0247

)mn

My commission expires: 09-30-05

Notary Public

HEWLETT-PACKARD COMPANY Intellectual Property Administrator P. O. Box 272400 Fort Collins, Colorado 80527-2400 PATENT APPLICATION

ATTORNEY DOCKET NO. 10014206-1

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPDC), in furtherance of my/our obligations to the Hewlett-Packard Company and its subsidiaries and affiliates, and do hereby assign and transfer to HPDC, 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:

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 HPDC to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by HPDC, 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, 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 HPDC, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to HPDC, 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 HPDC, 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 HPDC;

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 HPDC, 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 the attorneys of record 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.

MWITNESS WHEREOF, I/we here	unto set my/our hand(s) and seal(s):
I land Bourn	Date Assignment Signed: 4 th DECEIMBER 2003
Inventor's Signature (Seal)	
Inventor's Typed Name: <u>David Banks</u>	Date Application Signed: 4th DECEMBER 2003
State of	
);	ss.:
County of)	
Before me this day of	personally appeared <u>David Banks</u> who is
personally known or proved to me on the bas	sis of satisfactory evidence to be the person who acknowledged the foregoing
instrument of assignment to be his/her free act a	nd deed.
	Notery Foblic
	My commission expires.

Rev 10/03 (Assign)

RECORDED: 08/16/2004

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

PATENHATGE 1 of 1

REEL: 015063 FRAME: 0248