PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	:	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY	Y DATA				
		Execution Date			
Name Jeffrey Clifford Mogul			09/15/2009		
Eduardo Argollo de Oliveira Dias Junior			09/16/2009		
Paolo Faraboschi			09/16/2009		
Mehul A. Shah			09/15/2009		
RECEIVING PARTY	DATA				
Name:	Hewlett-Packard Development Company, L.P.				
Street Address:	11445 Compaq 0	11445 Compaq Center Drive West			
City:	Houston				
State/Country:	TEXAS				
Postal Code:	77070				
PROPERTY NUMBE	RS Total: 1				
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Property 7	Гуре : 12				
Property Application Number	Type 12 : 12 E DATA	561273	 ۶۲ 		
Property 7 Application Number CORRESPONDENC Fax Number:	Туре : 12 Е DATA (970)778-4	561273			
Property 7 Application Number CORRESPONDENC Fax Number:	Type : 12: E DATA (970)778-44 <i>be sent via US Ma</i> 970-898-47	561273 063 <i>il when the fax attempt is unsuccessfu</i> 28			
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PATENT REEL: 023242 FRAME: 0685

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

PATENT APPLICATION

ATTORNEY DOCKET NO. 200902335-1

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:

MAIN MEMORY WITH NON-VOLATILE MEMORY AND DRAM

Filing Date:

Application No.:

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 therefore; and any reissues, or reexaminations, or extensions of said Letters Patent.

Vwe 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 l/we hereby covenant that l/we have full right to convey the entire interest herein assigned, and that l/ we have not executed and will not execute any agreement in conflict herewith, and l/we further covenant and agree that l/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 l/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 here unto set my/our hand(s) and seal(s):

 John Signature (Seal)

 Jeffrey Clifford Mogul

 Inventor's Typed Name

 Stale of

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 Stale of

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Before me this day of _____, personally appeared ______ Jeffrey Clifford Mogul ______ 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 10/68 (Assignment)

County of

Page 1 of 2

Notary Public My Commission Expires:

PATENT REEL: 023242 FRAME: 0687

PATENT APPLICATION

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

ATTORNEY DOCKET NO. 200902335-1

ASSIGNMENT OF PATENT APPLICATION (cont.)

IN WITNESS WHEREOF, I/we hereunto set my/our hand(s) and seal(s):

Inventor's Signature (Seal)		Date Assignment Signed	
Eduardo Argolio de Oliveira Dias J	unite		
Inventor's Typed Name	21.00.74	Date Application Signed	<u></u>
State of)		
and the second) ss.:		
County of)		
Before me this day of		Eduardo Argollo de Oliveira Dias Juni	
known or proved to me on the b assignment to be his/her free act a		the person who acknowledged the	toregoing instrument of
		Notary Public	·····
		My Commission Expires	4
Inventor's Signature (Seal)		Date Assignment Signed	
Paolo Faraboschi			
Inventor's Typed Name	*******	Date Application Signed	······································
State of)		
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	, personally appeared	Paolo Faraboschi	who is personally
		a the person who acknowledged the	foregoing instrument of
assignment to be his/her free act a	ina deea.	·	
		Notary Public My Commission Expires	4
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Mehul A. Shah		9/15/0	9
Inventor's Typed Name		Date Application Signed	
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State of)		
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Before me this day of	, personally appeared	Mehul A. Shah	who is personally
assignment to be his/her free act a		e the person who acknowledged the	weren were were the second of
an a		Notary Public	

Rev 10/08 (Assignment)

My Commission Expires:

HEWLETT FACKARD COMPANY		PATENT APPLICATION			
P.O. 80x 272400 Fort Collins, Colorado 80827-2400		ATTORNEY DOCKET NO. 200902335-1			
ASSI	GNMENT OF PATENT	APPLICATION (cont.)			
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- <u>(V) (2014-X () A</u> (<u>0) (</u> Inventor's Signature (Seat)		Cate Assignment Signed			
Eduardo Argolio de Oliveire Dias Junior Inventor's Typed Name	2 ¹	<u> </u>			
State of)				
) 85.:				
County of)				
Before me this day of	personally appealed	Eduardo Argolio de Oliveira Dias Junior who is personally			
 known or proved to me on the basis assignment to be his/her free act and a 		ite person whe acknowledged the foregoing instrument of			
		1928 AVIAN My Commission Expansi			
inventor's Signature (Seat)	. <u></u>	9/16/ 2009 Date Assignment Signed 9/16/2009 Date Application Signed			
Paolo Farabosichi		<u></u>			
inventor's Typed Name		Diata Appleyation Signed			
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Baloie me (hisday c/	personally appeared	Paolo Faraboschi who is personally			
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		Kristov Prikov My Cristonessieni Experipei			
inventor's Signature (Seal)		Date Assignment Signed			
Mehui A. Shan Inventor's Typed Name		Date Application Signed			
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Bafore mailthis day of known or proved to me on the basis assignment to be hrufter free act and d	of satisfactory avidance to i	Mehul A. Shah who is personally be the person who adknowledged the foregoing instrument of wasay Public			
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RECORDED: 09/17/2009

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