4/27/09 attorney docket no. <u>200800845-1</u>		05-06-2009	ARTMENT OF COMMERC atent and Trademark Offic
REC			
4 Name of annual and display		103559409	: : :
Name of conveying party(ies): Ratnesh Kumar SHARMA		2. Name and address of rece	eiving party(ies):
Amip J. SHAH		HEWLETT-PACKARD DE 11445 Compaq Center Dr	VELOPMENT COMPANY, L.P.
Cullen E. BASH		Houston, TX 77707	ive vvest
Chandrakant PATEL			
Additional name(s) of conveying party(ies) attached	d? ∐Yes ເ×N	o Additional name(s) and address(es) attached? Yes XNo
	d? ∐Yes ⊠N	lo Additional name(s) and address(es) attached? ☐Yes ☒No
3. Nature of Conveyance:			es) attached? Yes No Agreement Joint
3. Nature of Conveyance: ☒ Assignment ☐ Merger ☐ Other	Change		
3. Nature of Conveyance: ☑ Assignment ☐ Merger ☐ Other Execution Date(s):4/23/09, 4/24/09, 4/23/09,	□ Change 4/23/09		
3. Nature of Conveyance: ☑ Assignment ☐ Merger ☐ Other Execution Date(s):4/23/09, 4/24/09, 4/23/09,	□ Change 4/23/09	of Name Security /	Agreement Joint
3. Nature of Conveyance: Assignment Merger Other Execution Date(s):4/23/09, 4/24/09, 4/23/09, 4/24/09, 4/23/09, 4/24/09, 4/23/09, 4/24/09, 4/23/09, 4/24/09, 4/23/09, 4/24/09, 4/23/09, 4/24/09, 4/23/09, 4/24/09, 4/23/09, 4/24/09, 4/23/09, 4/24/09, 4/23/09, 4/24/	□ Change 4/23/09	of Name Security /	Agreement Joint
3. Nature of Conveyance: X Assignment	□ Change 4/23/09 a new applicat	of Name Security /	Agreement Joint
3. Nature of Conveyance: X Assignment	□ Change 4/23/09 a new applicat	of Name Security And Security A	Agreement Joint
3. Nature of Conveyance: X Assignment	□ Change 4/23/09 a new applicat Date Filed	of Name Security of Name Security of Secur	Agreement Joint
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Execution Date(s):4/23/09, 4/24/09, 4/24/09, 4/23/09, 4/24/09, 4/24/09, 4/23/09, 4/24/09, 4/2	☐ Change 4/23/09 a new applicat Date Filed B. Patent	of Name Security And Security A	Agreement Joint Pation is: Ins and patents involved:

Marrie of February

Timothy B. Kang Name of Person Signing Signature

5/86/3889 parkes approved 052433 April 27, 2009

1643**036**3

documents: 4

Total number of pages including coversheet, attachments, and documents: 4

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

Page 1 of 4

Rev 11/08 (RecdAsgn)



Revenue Accounting and Management

Name/Number: 12430303

Total Records Found: 4

Start Date: Any Date

End Date: Any Date

Accounting Date	Sequence Num.	Fee Type	Fee Code	Fee Amount	Mailroom Date	Payment Method
05/06/2009	00000008	_1	8021	\$40.00	04/27/2009	DA 082025
05/05/2009	00000056	<u>1</u>	1011	\$330.00	04/27/2009	DA 082025
05/05/2009	00000057	1	1111	\$540.00	04/27/2009	DA 082025
05/05/2009	00000058	1	1311	\$220.00	04/27/2009	DA 082025

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

Rev 10/08 (Assignment)

PATENT APPLICATION

ATTORNEY DOCKET NO. ___

<u>200800845-1</u>

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:

COOLING RESOURCE CAPACIT	Y ALLOCATION USING I	LAGRANGE MULTIPLIERS	
Filing Date:		Application No.:	
and the invention(s) and improven P's), divisionals, and renewals of a Patent of the United States and or reissues, or reexaminations, or ext	nent(s) set forth therein, a and substitutes for said ap of countries foreign theret ensions of said Letters Pa	and any and all continuations, continuations continuation for said Letters Patent, and which may be granted thereon detent.	d any and all Letters or therefore; and any
held and enjoyed by HPDC, its sucterms for which said Letters Pater same would have been held and e AND I/we hereby covena we have not executed and will not that I/we will, each time a request necessary or desirable to perfect Patent, to HPDC, its successors, HPDC, or to its nominee, all know Letters Patent, to testify in any legicontinuations, C-I-P's, reissue and do everything possible to aid HP enforce, for its or their own benefit	ccessors, assigns, nomine at respectively may be grainjoyed by me/us had this ant that I/we have full right execute any agreement it is made, and without undutine title to said invention (assigns, nominees or legan facts respecting said in at proceedings, to sign all foreign applications, to mDC, its successors, assign, proper patent protections.	is in my/our name for Letters Patent tes or legal representatives, to the fanted, reissued or extended, as full assignment, and transfer not been reto convey the entire interest herein in conflict herewith, and I/we further the delay, execute and deliver all surface or improvement(s), said application application or improvement(s), said lawful papers, to execute all disclaimake all rightful oaths and declarations, nominees and legal represent in for said invention(s) or improvement in me/us in lending such cooperation	ull end of the term or y and entirely as the made; assigned, and that I/covenant and agree ch papers as may be tion and said Letters to communicate to application and said mers and divisionals, ons, and generally to atives to obtain and tent(s) in any and all
AND I/we hereby authorized and any official of any country capplications as aforesaid, to issue Patent for said invention(s) or implee issued and granted on or as a resulting further outhorized.	or countries foreign to the to HPDC, as assigned or rovement(s), including an esult of the application aford direct the attorneys of rattorney docket number as	issioner of Patents and Trademarks e United States whose duty it is of the entire right, title and interest y and all Letters Patent of the United presaid, in accordance with the term record to insert the serial number a mid title set forth above as soon as Trademark Office.	to issue patents on, any and all Letters ed States which may sof this assignment, and filing date of said
	we hereunto set my/our har		
Stratt -	QL_{-}	OU/23/09 Date Assignment Signed	
Inventor's Signature (Seal)			9
Ratnesh Kumar Sharma		O4/23/09 Date Application Signed	1
Inventor's Typed Name		Date Application Signed	
State of)) ss.:		
County of)	Rainesh Kumar Sharma	who is personally
Before me this day of	personally appeared	be the person who acknowledged the	foregoing instrument of
known or proved to me on the basis assignment to be his/her free act and	deed.		
assignment to be married not be		Notary Public My Commission Expires	:
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PATENT

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

Ray 10/08 (Assignment)

PATENT APPLICATION

ATTORNEY DOCKET NO. ___

200800845-1

ASSIGNMENT OF PATENT APPLICATION (cont.)

young state	ب	04/24/200	9
nventor's Signature (Seal)		Date Assignment Signed	
Amin I Chah		04/24/2009 Date Application Signed	1
Imip J. Shah nventor's Typed Name		Date Application Signed	
realion a Tabeo Manie		· ·	
State of)		
) ss.:		
County of)		
Sefore me this day of	, personally appeared	Amip J. Shah	who is personal
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		Notary Public My Commission Expires	,
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ventor's Typed Name		Date Application Signed	
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efore me this day of	, personally appeared	Chandrakent Patel	who is personally
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		Notary Public	
	Page 2 of 2	My Commission Explana	

PATENT REEL: 022652 FRAME: 0663 HEWLETT-PACKARD COMPANY Intellectual Property Administrator P.O. Box 272400 Fort Collins, Colorado 80527-2400

PATENT APPLICATION

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	
Amip J. Shah			
Inventor's Typed Name		Date Application Signed	
State of)) ss.:		
County of)		
Before me thisday of	, personally appeared	Amip J. Shah	who is personally
known or proved to me on the bas assignment to be his/her free act and		he person who acknowledged the fo	pregoing instrument of
		Notary Public My Commission Expires:	
Calle Da	<u></u>	4/23/09	
Inventor's Signature (Seal)		Date Assignment Signed	
Cullen E. Bash		4/23/09	
Inventor's Typed Name		Date Application Signed	
State of)) ss.:		
County of)		
	, personally appeared	Cullen E. Bash	who is personally
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		Notary Public My Commission Expires:	
CAST		4 23 200 Date Assignment Signed 4 23 200	9
Inventor's Signature (Seal)		Date Assignment Signed	25
Chandrakant Patel			
Inventor's Typed Name		Date Application Signed	
State of)) ss.:		
County of)		
Before me thisday of	, personally appeared	Chandrakant Patel	who is personally
known or proved to me on the bas	is of satisfactory evidence to be to deed	he person who acknowledged the fo	negonig mocomore
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D. AGOS (Accionment)	Page 2 of 2		

PATENT REEL: 022652 FRAME: 0664 Phoenix Applications Management System

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RECORDED: 04/27/2009

12430303

date: 04-29-2009

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