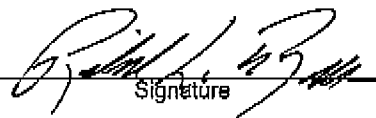


ATTORNEY DOCKET NO. 200902336-1

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

RECORDATION FORM COVER SHEET PATENTS ONLY	
1. Name of conveying party(ies): Rong Pan Martin B. Scholz	2. Name and address of receiving party(ies): HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P. 11445 Compaq Center Drive West Houston, TX 77707
Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Additional name(s) and address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Nature of Conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint <input type="checkbox"/> Other	
Execution Date(s): <u>10/30/2009; 10/28/2009</u>	
4. Application number(s) or patent number(s): If this document is being filed together with a new application, execution date of the application is: A. Patent Application No.(s) Application No.: <u>12/609,327</u> Date Filed: <u>October 30, 2009</u> Confirmation No.: <u>8172</u> B. Patent No.(s):	
Additional numbers attached? <u>NO</u>	
5. Name and address of party to whom correspondence concerning document should be mailed: Records Manager Intellectual Property Administration HEWLETT-PACKARD COMPANY P.O. Box 272400 Fort Collins, Colorado 80527-2400	6. Total number of applications and patents involved: _____ 7. Total Fee (37 CFR 3.41): \$40.00 _____ Enclosed <input checked="" type="checkbox"/> Authorization to be charged to deposit account.
8. Deposit Account Number: <u>08-2025</u>	
9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;"> <u>Richard L. Bell</u> Name of Person Signing </div> <div style="text-align: center;">  Signature </div> <div style="text-align: center;"> <u>October 30, 2009</u> Date </div> </div> <p style="text-align: center;">Total number of pages including coversheet, attachments, and documents: <u>3</u></p>	
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	

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

PATENT APPLICATION

ATTORNEY DOCKET NO. 200902336-1

ASSIGNMENT OF PATENT APPLICATION

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:

Methods And Systems For Determining Unknowns In Collaborative Filtering

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

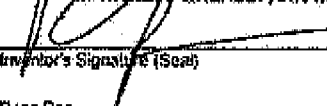
I/we additionally authorize HPDC to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by HPDC, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued 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 us 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):

	<u>10/30/2009</u>
Inventor's Signature (Seal)	Date Assignment Signed
Rong Pan	<u>10/30/2009</u>
Inventor's Typed Name	Date Application Signed

State of _____)
County of _____) ss:

Before me this _____ day of _____, personally appeared Rong Pan 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

Notary Public
My Commission Expires _____

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

PATENT APPLICATION

ATTORNEY DOCKET NO. 200902336-1

ASSIGNMENT OF PATENT APPLICATION (cont.)

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

Martin Scholz 10/28/09
Inventor's Signature (Seal) Date Assignment Signed

Martin B. Scholz 10/28/09
Inventor's Typed Name Date Application Signed

State of _____)
County of _____) ss.:

Before me this _____ day of _____, personally appeared Martin B. Scholz 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.

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 appeared _____ 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.

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 appeared _____ 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.

Notary Public
My Commission Expires: