	08-05-	2003			
,	r of Poton		<u> </u>		
To The Honorable Commissione	of Faten		d original documents or copy thereof.		
1. Name of conveying party(ies): 102516		508	s of receiving party(ies):		
Fang Wang First Assignor	July 14, 2003 Date of Execution	Name: Microsoft C			
Yee Man Bergstrom	July 26, 2003	Street Address: On	e Microsoft Way		
Second Assignor	Date of Execution	City: Redmond			
Jason Carlson	July 14, 2003	State Washington	ZIP 98052		
Third Assignor	Date of Execution	Additional name(s)	& address attached? YES NO		
Fourth Assignor	Date of Execution	3. Nature of Conve	yance (check only one):		
<i>-</i>		New Assignment New			
Fifth Assignor	Date of Execution	License Agreem Change of Nam	e		
			Paragraph (AC) - 173 (AC) - 173		
Sixth Assignor	Date of Execution		OPR/FINANCE		
			= 1		
Additional name(s) of conveying party(i	les) attached? YES NO				
			<u> </u>		
4 Identification of Application	number(s) patent number(s) OR	date of execution of	application to which assignment refers:		
Application Nos.: 10/404,746	Patent Nos.:		Date application was signed by the first		
			named executing inventor		
			(Fill-in this date only if assignment is filed		
			together with a new application)		
Name and address of party to whom correspondence		6 Tetal mumber of	Cambinations and entents involved, one		
concerning documents should be	e mailed:	6. Total number of applications and patents involved: one			
Name: George J. Awad WOODCOCK WASHBURN LI	CP	7. Total fee (37 CFR 3.41): \$40.00 ⊠ Enclosed			
One Liberty Place - 46th Floor		Authorized to be charged to Deposit Account Number 23-3050			
Philadelphia, Pennsylvania 1910 215-568-3100	03-7301	8. Please charge any deficiency or credit any overpayment to			
		Deposit Account Number 23-3050			
	DO NOT US	EE THIS SPACE			
9. Statement and signature.			of and any attached coming a few		
original document.	\sim 1	ion is irue ana corre	ct and any attached copy is a true copy of the		
George J. Awad/Reg. No. 46,528					
Name of Person Signing/Reg. No. Signature / Date					
Total number of pages including cover sheet, assignment document and additional pages attached thereto: 7					
Mail documents to be recorded with required cover sheet information to:					
04/2003 ECBRPER 00000146 10404746 Mail Stop Assignment Recordation Services Commissioner for Patents					
FC:8021 40.80 CP P.O. Box 1450 Alexandria, VA 22313-1450					

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial Number	
Filing Date	March 31, 2003
Inventorship	
Applicant	
Attorney's Docket No	
Title: A RENDERING INDEPENDENT PERSISTENCE	E OF INFORMATION

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s):

Fang Wang
618 168th Avenue, NE
Bellevue, Washington 98008

ymb 1/26/03

Yee Man Wong Borgstrom
555 Kirkland Way, #204
Kirkland, Washington 98033

Jason Carlson 12815 181st Avenue NE Redmond, Washington 98052

Assignee:

Microsoft Corporation Corporation in the State of Washington One Microsoft Way Redmond, WA 98052

AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled as described and claimed in the specification forming part of an application for United States letters patent referenced above;

WHEREAS, Microsoft Corporation (hereinafter referred to as ASSIGNEE), a corporation of the State of Washington having a place of business at One Microsoft Way, Redmond, WA 98052, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

Date	Fang Wang
7-26-2003 Date	Yee Man Wong Bergstrom VMB 7/26/03
 Date	Jason Carlson

		ORM COVER SHEET	Γ		
1. Name of conveying party(ies):	of Patents and Trademarks. Pl	ease record the attache	ed original documents or copy thereof.		
1. Ivalue of conveying party(les):		2. Name and address	s of receiving party(ies):		
Fang Wang	July 14, 2003	Name: Microsoft Corporation			
First Assignor	Date of Execution				
Yee Man Bergstrom	July 26, 2002	Street Address: One	Microsoft Way		
Second Assignor	July 26, 2003 Date of Execution	City: Redmond			
	Date of Execution	City: Rediffold			
Jason Carlson	July 14, 2003	State Washington	ZIP 98052		
Third Assignor	Date of Execution	A 1100 1 (X)			
			& address attached? YES NO		
Fourth Assignor	Date of Execution	3. Nature of Convey	vance (check only one):		
		New Assignment ✓ New Assignment	: Merger		
EiGh Aminum	Date of Francis	License Agreeme			
Fifth Assignor	Date of Execution	Change of Name	Other:		
Sixth Assignor	Date of Execution				
A #disianal mana (-) -6 ()				
Additional name(s) of conveying party(ies) attached? [] YES [X] NO				
4 Identification of Application pu	imher(s) natent number(s) OD	date of execution of a	pplication to which assignment refers:		
		date of execution of a	•		
Application Nos.: 10/404,746	Patent Nos.:		Date application was signed by the first		
			named executing inventor		
			(Fill-in this date only if assignment is filed		
			together with a new application)		
5. Name and address of party to w	thom correspondence				
concerning documents should be n		6. Total number of a	applications and patents involved: one		
.			Present and Parolice Mileston. <u>Gate</u>		
Name: George J. Awad		7. Total fee (37 CFR	3.41): \$40.00		
WOODCOCK WASHBURN LLP					
One Liberty Place - 46th Floor Philadelphia, Pennsylvania 19103	7201	23-3050	to be charged to Deposit Account Number		
215-568-3100	-/301	23-3030			
210 000 2100			y deficiency or credit any overpayment to		
		Deposit Account	Number 23-3050		
	DO NOT LIC	E THIS SDACE			
0	DO NOT US	E THIS SPACE			
9. Statement and signature.	helief the foregoing informati	ion is true and correct	and any attached copy is a true copy of the		
original document.	selles, ine joregoing injoying	2	/		
George J. Awad/Reg. No. 46,528	/s L	Se (1.16)	1 7/2 /12		
-	790	my Jun	7/30/03		
Name of Person Signing/Reg. No. Signature / / Date					
Total number of pages including cover sheet, assignment document and additional pages attached thereto: 7					
2					
Mail documents to be recorded with required cover sheet information to:					
Mail Stop Assignment Recordation Services					
		oner for Patents Box 1450			
Alexandria, VA 22313-1450					
	and the second s				

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial Number	10/404,746
Filing Date	March 31, 2003
Inventorship	Fang Wang et al.
Applicant	
Attorney's Docket No.	MSFT-1524
THE A PENDEPING INDEPENDENT PERSISTENCE OF	INTEGRACION

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s):

Fang Wang 618 168th Avenue, NE Bellevue, Washington 98008

Yee Man Wong 555 Kirkland Way, #204 Kirkland, Washington 98033

Jason Carlson 12815 181st Avenue NE Redmond, Washington 98052

<u>Assignee:</u>

Microsoft Corporation Corporation in the State of Washington One Microsoft Way Redmond, WA 98052

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JUL 14 6000 10.11 1/1/ 1/F/F1 00

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NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

7/14/03 Date

Fang Wang

Date

Yee Man Wong

7-14-03

Date

Jason Carlson