-	· OIPE OF	ô-15-2005		
	RECOR HANDER HANDER HANDER			
	2 6 1000	02930883		
	To the Director of the U.S. Patent and Trademark Office: Please	or the new address(es) below.		
	1. Name of colivering party(ies)/Execution Date(s):	2. Name and address of receiving party(ies):		
	Surajit Chaudhuri May 18, 2001 Vivek Narasayya May 18, 2001 Gantam Das May 18, 2001	Name: <u>Microsoft Corporation</u>		
		Address: One Microsoft Way , Bldg 109		
)	Gantam Das May 18, 2001	City: Redmond State: Washington		
,	Additional name(s) of conveying party(ies) attached?	Zip: 98052		
		Country: United States		
	3. Nature of conveyance:			
	Assignment			
	☐ Security Agreement ☐ Change of Name			
	☐ Government Interest Assignment			
	☐ Executive Order 9424, Confirmatory License	Additional name(s) & address(es) attached?    Yes  No		
□ Other				
	09/861,960 B. Pa  Additional numbers attached?	Yes 🗷 No		
	5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:		
Ī	Name: Microsoft Corporation	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00		
ŀ	Internal Address: Patent Group Docketing	Authorized to be charged to deposit account		
	Street Address: One Microsoft Way	Enclosed None required (government interest not affecting title)		
	City: Redmond			
	State: Washington	who con a mooning uno		
	Zip: <u>98052</u>	8. Payment Information		
	Country: United States			
	Phone Number: (425) – 707-3913	Deposit Account Number: 50-0463  Authorized User Name: Paul B. Heynssens		
	Fax Number: (425) - 708-5046			
	Email Address: msdocket@microsoft.com	Charge 40.00		
	1//	40.00		
	9. Signature: AUTI NSSEN	5/23/05		
	Signature	Date		
	Paul B. Heynssens, Reg No. 47,648  Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:		
- 1		<b>└</b>		

PATENT REEL: 016141 FRAME: 0758 FORM PTO-18 (Modified)

## FORM COVER 101736209 FORM C

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office 15-865 - 4254

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy thereof.							
1.	Name of conveying party(les): 05/2//0/	Name and address of receiving party(les):					
	Surajit Chaudhuri, Vivek Narasayya and Gautam Das	Microsoft Corporation One Microsoft Way Redmond, WA, 98052 F7.39   52   258   15					
3.	X Assignment Merger U	Sereby certify that this paper is being deposited with the Service as Express Mail addressed to the elistant Commissioner for Patents. Machington 20 402					
<ol> <li>Application number(s) or patent number(s):</li> <li>If this document is being filed together with a new application, the execution date of the application is: May 18, 20</li> </ol>							
	A. Patent Application No(s).:  89/86/960	B. Patent No(s).;					
<b>5</b> ,	Name and address of party to whom correspondence concerning document should be mailed:	Total number of applications and patents involved: _1					
	Stephen J. Schultz WATTS, HOFFMANN, FISHER & HEINKE CO., L.P.A. 1100 Superior Ave., Ste. 1750 Cleveland, Ohio 44114	Total fee (37 C.F.R. §§ 1.21(h), 3.41): \$ 40.00  X Enclosed.  Authorized to be charged to deposit account.  X The Commissioner is hereby authorized to credit any overpayment or to charge any fee deficiencies under 37 C.F.R. § 1.21(h) to our deposit account.  8. Deposit account number: 23-0630					
DO NOT USE THIS SPACE							
9.	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.  Stephen J. Schultz, Reg. No. 29,108  Name of Person Signing  Total number of pages including cover sheet, attachments, and document: 2  Mail documents to be recorded with required cover sheet information to:						
Commissioner of Patents & Trademarks BOX ASSIGNMENTS Washington, D.C. 20231							

**PATENT** 

**REEL: 016141 FRAME: 0759** 

## ASSIGNMENT

WHEREAS, we, <u>Surajit Chaudhuri</u>, <u>Vivek Narasayya</u> and <u>Guatam Das</u> (hereinafter referred to as ASSIGNORS), having post office addresses of <u>14909 N.E. 75<sup>th</sup> Court</u>, <u>Redmond</u>, <u>Washington 98052</u>, <u>8506 139<sup>th</sup> Ave. N.E., Redmond</u>, <u>Washington 98052</u> and <u>2521 276<sup>th</sup> Court N.E., Redmond</u>, <u>Washington 98053</u> respectively, are the joint inventors of an invention entitled "<u>OPTIMIZATION BASED METHOD FOR ESTIMATING THE RESULTS OF AGGREGATE QUERIES</u>," as described and claimed in the specification forming part of an application for United States letters patent filed concurrently herewith;

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, Washington 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, ASSIGNORS hereby sell, assign and transfer unto said 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 ASSIGNORS had this assignment, transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS 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.

State of Wanna (700)

SS

County of (106)

This \( \limits \) day of \( \limits \) 2001, before me personally came the above-named \( \frac{\text{Surajit Chaudhuri}}{\text{Surajit Chaudhuri}} \) to me personally known as the individual who executed the foregoing assignment, and who acknowledged to methat he executed the same of his own free will for the purpose therein set forth.

A HOGO

NOTARY TO NOTA

PATENT REEL: 016141 FRAME: 0760 N.R. nim Vivek Narasayya

State of MASHINITON	Vivek Narasayya			
State of Washington) SS County of KING				
This 18 day of man		anally came the above-named	l Vivek Narasavas to me	nerconalli
known as the individual who execu	trad the foregoing essignmen	on and who asknowledged to	me that he evenuted the	personan;
		it, and who acknowledged to	The that he executed the	same of m
State of WATHINGTON) SS County of KING	NOTARY TO	Notary Public	Ah	_
State of WAHINGTON	OF WASHINGTON TO	m -Guatain Das		
County of KING			<b>C</b>	
This 18 day of may	, 2001, before me perso	nally came the above-named	Gantam I <del>Guatam Das</del> to me perso	onally
known as the individual who execu	ited the foregoing assignmen	it, and who acknowledged to	me that he executed the s	same of his
own free will for the purpose there	in set forth.	Mays.	A Dage	
	HA. HOS	Notary Public	1 Jon	Name of the last o
100	PUBLIC	V		
5 .	7090C • 4			

**RECORDED: 05/28/2005** 

PATENT REEL: 016141 FRAME: 0761