

8-24-01

08-29-2001

FORM PTO-1595  
(Modified)

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U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
14-816C1 - 4254

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy thereof.

1. Name of conveying party(ies):

Usama Fayyad and Jayavel Shanmugasundaram

2. Name and address of receiving party(ies):

Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052

3. Nature of conveyance:

☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other:Execution Date: January 19, 2001 and August 8, 2001,  
respectivelyI hereby certify that this paper is being deposited  
with the U.S. Postal Service as 1st Class Mail  
addressed to the Commissioner of Patents and  
Trademarks, Washington, D.C. 20231 on 8/23/01By: Haren Burmaki

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s):

09/606,964

B. Patent No(s):

5. Name and address of party to whom correspondence  
concerning document should be mailed:Stephen J. Schultz  
WATTS, HOFFMANN, FISHER & HEINKE CO., L.P.A.  
1100 Superior Ave., Ste. 1750  
Cleveland, Ohio 441146. Total number of applications and patents involved: 17. Total fee (37 C.F.R. §§ 1.21(h), 3.41): \$ 40.00☒ Enclosed.☐ Authorized to be charged to deposit account.☒ 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

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9. Statement and signature.

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 SigningStephen Schultz  
SignatureAugust 22, 2001  
DateTotal number of pages including cover sheet, attachments, and document: 4Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks  
BOX ASSIGNMENTS  
Washington, D.C. 20231

{ 8/28/2001 LMUELLER 00000296 09606964

{ 01 FD:581

40.00 DF

PATENT  
REEL: 012104 FRAME: 0782

# ASSIGNMENT

WHEREAS, we, Usama Fayyad and Jayavel Shanmugasundaram (hereinafter referred to as ASSIGNORS), having post office addresses of 9705 SE 43<sup>rd</sup> Street, Mercer Island, Washington 98040 and 7147 Via Maria, San Jose, CA 95139, respectively, are the joint inventors of an invention entitled "MULTI-DIMENSIONAL DATABASE RECORD COMPRESSION UTILIZING OPTIMIZED CLUSTER MODELS," as described and claimed in the specification forming part of an application for United States letters patent filed June 29, 2000 as application serial number 09/606,964;

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.

U M. FAYYAD

Inventor's Signature

Date

1/19/2001

Usama Fayyad

Inventor's Printed Name

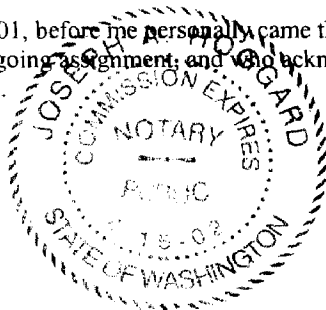
State of Washington

County of King

This 19 day of January, 2001, before me personally came the above-named Usama Fayyad to me personally known as the individual who executed the foregoing assignment, and he acknowledged to me that they executed the same of his own free will for the purposes therein set forth.

Notary Public

Joseph A. Fitzgerald

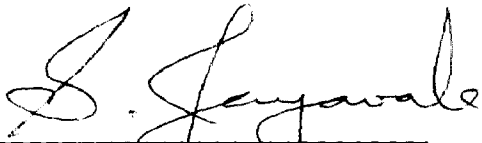


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NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE, the entire right, title and interest in and to said invention, said application 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.

  
Inventor's Signature

08 AUG 2001

JAYAVEL SHANMUGASUNDARAM

# ALL-PURPOSE ACKNOWLEDGEMENT

State of California

County of Santa Clara

} SS.

On August 8, 2001 before me, Errol O. Smedley

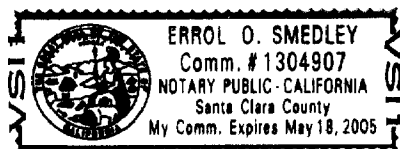
(DATE)

(NOTARY)

personally appeared Jayavel Shanmugasundaram

(SIGNER'S)

☐ personally known to me - OR - ☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signatures(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

Errol O. Smedley  
(NOTARY'S SIGNATURE)

## OPTIONAL INFORMATION

The information below is not required by law. However, it could prevent fraudulent attachment of this acknowledgement to an unauthorized document.

### CAPACITY CLAIMED BY SIGNER (PRINCIPAL)

☒ INDIVIDUAL  
☐ CORPORATE OFFICER

☐ PARTNER(S)  
☐ ATTORNEY-IN-FACT  
☐ TRUSTEE(S)  
☐ GUARDIAN/CONSERVATOR  
☐ OTHER

### DESCRIPTION OF ATTACHED DOCUMENT

Assignment

TITLE OR TYPE OF DOCUMENT

1

NUMBER OF PAGES

8-8-01

DATE OF DOCUMENT

OTHER

SIGNER IS REPRESENTING:  
NAME OF PERSON(S) OR ENTITY (ES)

Self

RIGHT THUMBPRINT  
OF  
SIGNER

