FORM PTO-1584 01-10-96:CMG 6 - 30 99

Commissioner of Patents and Trademarks

(0651-0011), Washington, D.C. 20503.

Box Assignments

07-12-1999

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

tty Ref/Docket No.: 777.256US1	 101087477	

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Douglas S. Boa, Simon M. Meacham and Barry M. Nolte Microsoft Corporation Name: Additional name(s) of conveying party(ies) attached? []Yes [X]No Street Address: One Microsoft Way 3. Nature of conveyance: [X] Assignment [] Merger State: WA ZIP: 98052-6399 [] Security Agreement [] Change of Name [] Other _ Additional name(s) & address(es) attached? []Yes [X]No Execution Date: June 30, 1999 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: _____lune 30, 1999_ B. Patent No.(s) A. Patent Application No.(s) Additional numbers attached? []Yes [X]No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 1 concerning document should be mailed: 7. Total fee (37 CFR 3.41):\$_40.00 Name: Bradley A. Forrest Address: Schwegman, Lundberg, Woessner & Kluth, P.A. [X] Enclosed P.O. Box 2938 [] Authorized to be charged to deposit account Minneapolis, MN 55402 8. Please charge any additional fees or credit any overpayments to our Deposit account number: 19-0743 DO NOT USE THIS SPACE 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. Bradley A. Forrest/Reg. No. 30,837 Date Name of Person Signing Total number of pages including cover sheet: 4 OMB No. 0651-0011 (exp. 4/94) 07/12/1999 MTHAI1 00000043 09345176 Do not detach this portion 01 FC+561 documents to be recorded with red0+00 cover sheet information to:

Washington, D.C. 20231

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of information systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project

PATENT REEL: 010075 FRAME: 0246

ASSIGNMENT

WHEREAS, we, Douglas S. Boa, Simon M. Meacham and Barry M. Nolte (hereinafter referred to as ASSIGNORS), having post office addresses of 11445 176th Place NE, Redmond, WA 98052, 4609 168th Court NE, Redmond, WA 98052 and 13123 NE 111th Place, Kirkland, WA 98033 respectively, are the joint inventors of an invention entitled "METHOD AND APPARATUS FOR FINDING NEAREST LOGICAL RECORD IN A HASH TABLE", as described and claimed in the specification forming part of an application for United States letters patent executed 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, WA 98052-6399, 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 virture 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 tetters patent, or for the purpose of protecting title to said invention or letters patent therefor.

> PATENT REEL: 010075 FRAME: 0247

ASSIGNMENT

Applicant: Invention:

Douglas S. Bost et al.

METTIOD AND APPARATUS FOR FINDING NEAREST LOGICAL RECORD IN A HASH TABLE

Docket No.: 777.256US1

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 30 day of Sure

STATE OF WASHINGTONS

On this 30 day of Sune, 1999 before me personally appeared Douglas S. Boa to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set

forth.

ISEAL

WHEREOF, I have hereunted set my hand this

STATE OF KING)ss.

On this July of Sure, 1999 before me personally appeared Simon M. Meacham to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same/for the uses and

purposes therein set forth.

[SEAL]

PATENT

REEL: 010075 FRAME: 0248

ASSIGNMENT

Applicant: Invention: Douglas S. Bos et al.

Docket No.: 777.256US1

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METHOD AND APPARATUS FOR FINDING NEAREST LOCICAL RECORD IN A HASII TABLE

IN TESTIMONY WHEREOF, I have hereunto set my hand this Joday of Jave

.... 1999.

Barry M. Nolte

STATE OF 4

COUNTY OF KING)ss.

RECORDED: 06/30/1999

On this 20 day of Swee, 1999 before me personally appeared Barry M. Nolte to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set

forth.

[SEAL]

Novery Public