| 12-10-200† | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| MSFT-0570/167379.1 | | | | |
| To The Honorable Commissioner of Patents a | 107911 and Trademarks. | 148 ache | ed original documents or o | copy thereof. |
| Name of conveying party(ies): | | Name and address of receiving party(ies): | | |
| Patrick Eugene O'Neil First Assignor | Name: MICROSOFT CORPORATION | | | |
| | ovember 20, 2001 | Street Address: O | ne Microsoft Way | |
| Second Assignor | Date of Execution | City: : Redmond | | § 8 |
| Third Assignor | Date of Execution | State Washin | gton | ZIP 98052 |
| Fourth Assignor | Date of Execution | Additional name(s) & address attached? ()YES (X)NO 3. Nature of Conveyance (check only one): (x) New Assignment () Merger () License Agreement () Security Agreement | | |
| Fifth Assignor | Date of Execution | | | |
| Sixth Assignor | Date of Execution | () Change of Nar | | , |
| Additional name(s) of conveying party(ies) attached | ()Cross-reference of Assignment filed in United States Application No/,, recorded on at Reel Noand Frame No | | | |
| 4. Identification of Application number(s), pa | etent number(s) OR o | date of execution of ap | pplication to which assign Date application was signamed executing inventor November 20, 2001 (Fill-in this date only if a filed together with a new | gned by the first or assignment is |
| 5. Name and address of party to whom corrections documents should be mailed: | 6. Total number of applications and patents involved: 1 | | | |
| Name: Peter M.Ullman WOODCOCK WASHBURN LLP One Liberty Place - 46th Floor Philadelphia, Pennsylvania 19103-7301 215-568-3100 | 7. Total fee (37 CFR 3.41):\$40.00 () Enclosed () Authorized to be charged to Deposit Account Number 23-3050 | | | |
| 12/07/2001 STEM11 00000086 09997531 D1 EC:581 40.00 BP | | | y deficiency or credit any Deposit Account Number | |
| | DO NOT USE | THIS SPACE | | |
| 9. Statement and signature. To the best of my knowledge and belief, the the original document. Peter M. Ullman/43,963 Name of Person Signing/Reg. No. | foregoing information | | nd any attached copy is a | |
| Total number of pages including cover sheet, assignment document and additional pages attached thereto:5 | | | | |
| Mail documents to be recorded with required cover sheet in | nformation to: Commissioner of Pate Box Assig Washington, | gnments | | |

PATENT REEL: 012344 FRAME: 0970

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Serial | Number | Not Yet Assigned |
|--------|-----------------------------|-------------------------------|
| Filing | Date | Herewith |
| Invent | torship | Patrick Eugene O'Neil, et al. |
| Applie | cant | Microsoft Corporation |
| Attorn | ney's Docket No | MSFT-0570/167379.1 |
| | SYSTEM AND METHOD FOR RELAT | |
| | OF HIERARCHICAL DATA | |

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s):

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Elizabeth Jean O'Neil 27 Ware Street Cambridge, Massachusetts 02138

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> PATENT REEL: 012344 FRAME: 0971

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 "System and Method for Relational Representation of Hierarchical Data" 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;

PATENT

REEL: 012344 FRAME: 0972

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.

Nov- 20, 2001

Patrick Eugene O'Neil

Mov. 20, 2001

Elizabeth Jean O'Neil

REEL: 012344 FRAME: 0973

PATENT TOTAL P.Ø8
REEL: 012344 FRAME: 0974