ocket No.: MCS-053-99 12-03-1999 FORM PTO-:595 (Modified) RE U.S. DEPARTMENT OF COMMERCE (Re 6-93) Patent and Trademark Office OMis No. 0651-0011 (exp.4/94) NOV 1 7 1999 Copyright 1996-97 LegalStar P084/REV02 Tab settinas → 101213270 ease record the attached original documents or copy thereof. To the Honorable Commissioner and atents a. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Zhengvou Zhang, Padmananbhan Anandan and Heung-Yeung Shum Name: Microsoft Corporation Address: One Microsoft Way 3. Nature of conveyance: ★ Assignment Merger City: Redmond _____State/Prov.: WA Security Agreement Change of Name Country: USA Other Execution Date: 9/14/99 and 11/1/99 Additional name(s) & address(es) attached? 4. Application number(s) or registration numbers(s): If this document is being filed together with a new application, the execution date of the application is: Patent Application No. Filing date B. Patent No.(s) 6/19/99 09/336,218 Additional numbers attached? Yes No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: Edmond A. DeFrank 7. Total fee (37 CFR 3.41):....\$ 40.00 Registration No. 37,814 Enclosed - Any excess or insufficiency should be credited or debited to deposit account Address: LYON HARR & DEFRANK Authorized to be charged to deposit account 300 East Esplanade Drive Suite 800 8. Deposit account number: City: Oxnard State/Prov.: CA 50-0463 ZIP: 93030 Country: USA DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is are copy of the original document Edmond A. DeFrank 11/10/99 Name of Person Signing Signature Date Total number of pages including cover sheet, attachments, and document:

REEL: 010407 FRAME: 0299

ASSIGNMENT

WHEREAS, we, Zhengyou Zhang, Padmananbhan Anandan and Heung-Yeung Shum (hereinafter referred to as ASSIGNORS), having post office addresses 10090 177th Ave NE, Redmond, WA 98052; 1104 E Lake Sammamish Pkwy SE, Issaquah, WA 98029 and 3515 167th Place NE, Bellevue, WA 98008, respectively, are the inventors of an invention entitled "A SYSTEM AND METHOD FOR DETERMINING STRUCTURE AND MOTION USING MULTIPLE SETS OF IMAGES FROM DIFFERENT PROJECTION MODELS FOR OBJECT MODELING," as described and claimed in the specification forming part of an application for United States letters patent filed June 19, 1999 and assigned Serial No. 09/336,218;

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;

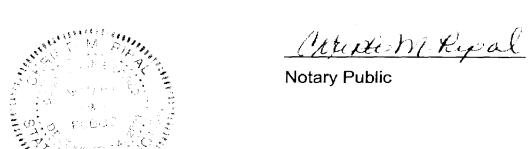
NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted 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

PATENT REEL: 010407 FRAME: 0300 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.

IN WITNESS WHEREOF, I have hereunto signed my name on the day and year set forth below.

1) ASSIGNOR	
- Latt	Dated: 9/14/99
Zhengyou Zhang	,
State of <u>Lcy/</u>	
County of Filips	

On this ______ day of _______, 1999, before me, a Notary Public in and for the State and County aforesaid, personally appeared Zhengyou Zhang, known to me to be the person of that name, who signed the foregoing instrument, and who acknowledged that he signed it as a free act on his behalf, on the day and year aforesaid.



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· win/·		
2) ASSIGNOR LANDON		
2) ASSIGNOR Anandan Padmananbhan Anandan	Dated: 9/14/99	
Padmananbhan Anandan		
State of		
County of		
	$2\pi \omega / e \approx 199$ before me. a	
On this day of day of, 19 <u>F</u> , before me, a Notary Public in and for the State and County aforesaid, personally appeared		
Padmananbhan Anandan, known to me to be the person of that name, who signed		
the foregoing instrument, and who acknowled		
his behalf, on the day and year aforesaid.		
3) ASSIGNOR	<u>Christem Ripal</u> Notary Public	
hiphun.	Dated: 11/1/99	
Heung-Yeung Shum		
State of		
On thisday of	19, before me, a	
Notary Public in and for the State and County aforesaid, personally appeared		
Heung-Yeung Shum, known to me to be the person of that name, who signed the		
foregoing instrument, and who acknowledged that he signed it as a free act on his		
behalf, on the day and year aforesaid.		
•	Dienne Comme	

Notary Public Wilness

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RECORDED: 11/17/1999