### Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: **NEW ASSIGNMENT** NATURE OF CONVEYANCE: **ASSIGNMENT** 

#### **CONVEYING PARTY DATA**

Name	Execution Date
Silicon Graphics, Inc.	09/28/2001

#### **RECEIVING PARTY DATA**

Name:	Microsoft Corporation
Street Address:	One Microsoft Way
City:	Redmond
State/Country:	WASHINGTON
Postal Code:	98052

#### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	09632662

#### **CORRESPONDENCE DATA**

Fax Number: (425)936-7329

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 425-703-6136

Email: courts@microsoft.com Correspondent Name: Courtney Scanlon Address Line 1: One Microsoft Way Address Line 2: Patent Group Docketing

Address Line 4: Redmond, WASHINGTON 98052

NAME OF SUBMITTER: Courtney Scanlon

**Total Attachments: 20** 

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500023043 REEL: 015760 FRAME: 0201

**PATENT** 

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#### **EXHIBIT 1**

### CONFIRMING ASSIGNMENT

WHEREAS, SILICON GRAPHICS, INC., a Delaware Corporation, ("SGI"), and MICROSOFT CORPORATION, a Washington Corporation ("TOSOFT"), entered into various patent agreements, including a CONFIDENTIAL PATENT ASSIGNMENT ("Correction");

WHEREAS, on September 28, 2001, SGI assigned and transferred to Nuclear all right, title and interest in and to certain inventions, patents and patent applications (hereinafter referred to as the "Intellectual Property"), including the patents and patent applications as set forth in Schedule 1 hereto; and

WHEREAS, the parties need a document which can be recorded to demonstrate the assignment of the patent applications and patents as set forth in the attached Schedule 1.

Now, Therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, SGI does hereby confirm that SGI assigned and transferred to Microsoft and to Microsoft's legal representatives, successors and assigns, its full and exclusive rights in and to the Intellectual Property, including the patents and patent applications as set forth in Schedule 1 hereto, in the U.S. and every foreign country and its entire right, title, and interest in and to the Intellectual Property and related applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the Intellectual Property, and extensions or derivations thereof, both foreign and domestic, that may issue thereon, and we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

SGI HEREBY CONFIRMS THAT SGI authorized Microsoft to insert in Schedule 1 to this assignment document the filing date and application number of any application if the date and number are unavailable at the time this document is executed.

SGI HEREBY CONFIRMS THAT SGI conveyed to Microsoft the right to make application in its own behalf for protection of the Intellectual Property in the U.S. and countries foreign to the U.S. and to claim under the Patent Cooperation Treaty, the International Convention and/or other international arrangement for any such application the date of any earlier U.S. application (or any other application on the invention) to gain priority with respect to other applications.

IN WITNESS WHEREOF, SGI has caused one of its officers to hereunder set his hand on the date shown below.

Date <u>March 26, 2002</u>	Sandra Escher
	General Counsel Title
STATE OF	
On this 26 <sup>th</sup> day of <u>Ma</u> Public in and for said county, appeared <u>S</u> to be the same person whose name is sub- acknowledged that he/she signed and deliv for the uses and purposes therein set forth.	, 2002, before me, a Notary and a Eschue, who is personally known to me scribed to the foregoing assignment document, and ered the document as his/her free and voluntary act
JENNIFER MUIR COMM.# 1299866 Notary Public - California & SANTA CLARA COUNTY I My Commission Expires April 6, 2005	Notary Public My Commission Expires: April 6, 2005

## Schedule 1 - U.S. Patent Applications

· · · · · · · · · · · · · · · · · · ·	Country	Application No.	1722	Filing Date
			Method And Apparatus For Clearing A Region Of Z-	Otto 100
raphics Rendering	us	243789	Buffer	9/13/88
rapnics Rendering			Method And Apparatus For Clearing A Region Of Z-	
	US	527644	Buffer	5/22/90
			Clock Switching Circuit For Asynchronous Clocks Of	
	US	244401	Graphics Generation Apparatus	9/15/88
			Integrated Apparatus For Displaying A Plurality Of	
			Modes Of Color Information On A Computer Output	
	110	715550	Display	6/14/91
	US	305095	Video Timing And Display Id Generator	9/13/94
	US	00000	Graphical Representation Of Computer Network	and the second s
		590670	Topology And Activity	9/28/90
	US	390010	Graphical Representation Of Computer Network	And the latest terminal states and the states of the state
		000407	Topology And Activity	7/2/93
	US	087137	Graphics Memory Apparatus And Method	7/22/91
	US	733313	Z-Subdivision For Improved Texture Mapping	2/19/91
di alikuwa manaka manaka na kata na ka	US	657325	Antialiased Imaging With Improved Supersampling	7/9/93
	US	089929	A Method And Apparatus For Generating Computer	
4,64			A Method And Apparatus For Generating Computer	7/9/93
	US	089801	Graphic Images Incorporating Projected Textures	
			A Method And Apparatus For Interactive Generation O	7/9/93
	US	089799	Shadowed Scenes	710400
			The state of the s	6/7/95
	US	472216	System And Method For Antialiasing Of Texture Edges	Official
			Unified Memory Computer Architecture With Dynamic	0.100/00
	US	137067	Graphics Memory Allocation	8/20/98
		The same of the sa	3D Graphics In A Computer System Having A Unified	n in in a
	US	09/243930	Memory Architecture	2/3/99
			Method For Accessing A Unified Memory Architecture	
	US	09/244258	in A Computer System	2/3/99
			Bus Structure For A Unified Memory Architecture in A	
	US	09/243899	Computer System	2/3/99
	<u> </u>		System Software For Use In A Graphics Computer	
			Curtam Having A Shared System Memory And	
		and a service	Supporting DM Phuffers And Other Constructs Aliased	
		08/914897	As DM Buffers	8/20/97
	US	U0/3 17001	System And Method For Displaying Active Uniform	
			Network Resource Locators Embedded In A Time	
		20100000	Based Medium	9/10/99
	US	09/393250	Morphing Based On Multiple Weighted Parameters	10/20/98
	US	175320	Method, System And Computer Program Product For	
······································	T	and the control of th	Method, System And Computer Program Product of	-
		2	Providing Color Illumination In Computer Graphics	5/1/98
	US	070809	Shading And Animation	1
			Method And Apparatus For Rasterizing In A	7/2/98
	US	091599	Hierarchical Tile Order	3/23/99
	US	09/274169	Antialiasing Method For Computer Graphics	J. 2. 30
				.1
		CAX (I) Vente	Method, System And Computer Program Product For	7/7/99
	us	60/142547	Multi-Pass Bump-Mapping Into An Environment Map	111199
······			Method, System, And A Computer Program Product	Fp
		C C C C C C C C C C C C C C C C C C C	Filtering A Texture Applied To A Surface Of A	
•	us	60/227940	Computer Generated Object	8/25/00
	US	not yet assigned	Texture Tiling With Adjacency Information	10/5/01
		09/632605	Video Card With Interchangeable Connector Module	8/4/00
	US	09/632443	System And Method For Frame Rate Matching	8/4/00
	US	( V3/U324**3	3-7	

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# Schedule 1 - Foreign Patents and Applications

	Title	Application No.	Foreign Filing Date	Patent No.	Issue Date	Status
Country	Method And Apparetus For Clearing A Region Of Z-Buffer	89910803.9	9/12/89	551251	2/7/96	
France		89910803.9	9/12/89	551251	2/7/96	
Great Britain	Method And Apparatus For Clearing A Region Of Z-Buffer  Method For Updating Pipelined Single Port Z-Buffer By	89910565.4	9/11/89	433373	5/29/96	
Switzerland	Segments On A Scan Line Graphics Processor With Staggered Memory Timing	89910710.6	9/12/89		<u> </u>	
WO DE	Integrated Apparatus For Displaying A Plurality Of Modes Of Color Information On A Computer Output Display	P4232144.1-53	25-Sep-92			
G8	Integrated Apparatus For Displaying A Plurality Of Modes Of Color Information On A Computer Output Display	9218986.9	8-Sep-92	2270450	3/26/97	
JP	Integrated Apparatus For Displaying A Plurality Of Modes Of Color Information On A Computer Output Display	2010000	7-Oct-92	***************************************		
.p	A Method And Apparatus For Generating Computer Graphic Images Incorporating Projected Textures	180466/94	11-Jul- <del>94</del>			<u> </u>
	A Method And Apparatus For Interactive Generation Of Shadowed Scenes	180467/94	7/11/94	ļ		<u> </u>
JP	Subsampled Texture Edge Antialiasing	99907170.7	23-Feb-99	<u></u>		+
EP	Subsampled Texture Edge Antialissing	2000-534973	23-Feb-99	<u> </u>		<del> </del>
JP	Subsampled Texture Edge Antialissing	US99/03816	23-Feb-99	<u> </u>		<del> </del>
WO	Method And Apparatus For Texture Memory Management	00916656.2	24-Mar-00			<del> </del>
EP	Video Card With Interchangeable Connector Module	US00/21356	4-Aug-00	<u> </u>		<del> </del>
WO	System And Method For Frame Rate Matching	US00/21367		1		1

# (Replacement for Schedule A of Exhibit A to Confidential Patent Assignment - September 28, 2001)

	Country	Patent No.	Assignment - September 28, 2001) Title	issue Date
	US	5,506,624	Rotating Sample of Video Images	4/9/96
igital Media	US	5,745,713	Movie-Based Facility for Launching Application Programs of Services	4/28/98
	US	5,774,666	System and Method for Displaying Uniform Network Resource Locators Embedded in Time-Based Medium	6/30/98
	US	5,987,509	System and Method for Displaying an Active URL During Playback of a Media File or Media Broadcast	11/16/99
	US	5,808,662	Synchronized, Interactive Playback of Digital Movies Across a Network	9/14/98
	US	5,943,347	Apparatus and Method for Error Concealment in an Audio Stream	8/24/99
	US	6,005,600	High Performance Player for Distributed, Time-Based Media	12/21/99
	US	6,147,695	System and Method for Combining Multiple Video Streams	11/14/00
	US	6,075,906	System and Method for the Scaling of Image Streams that Use Motion Vectors	6/13/00
	US	D365;585	Video Camera Used with Personal Computer	12/26/95
	, and the second se	5,604,866	Flow Control System Having a Counter in Transmitter for Decrementing and Incrementing Based Upon Transmitting and Received Message Size Respectively for Indicating Fre Space in Receiver	2/18/97
	US		Digital Filtering for Lenticular Printing	5/10/94
	US	5,311,329	Digital Filtering for Centicular Printing	8/1/95
	US	5,438,429	Digital Filtering for Lenticular Printing  System Software for Use in a Graphics Computer System	3/30/00
	US	6,070,002	Having a Shared System Memory  System and Method for a Computer-Based Dynamic	
		5,649,186	Information Clipping Service	
nternet	US	5,737,560	Graphical Method and System for Accessing Information on a Communications Network	4/7/98
	.US US	5,877,767	Graphical Method and System for Accessing Information of a Communications Network	3/2/99
	US	5,742,768	System and Method for Providing and Displaying a Web Page Having an Embedded Menu	
	US	5,890,170	Method and Apparatus for Publishing Documents in a Hypertextual Network Environment	3/30/99
	US	6,026,433	Method of Creating and Editing a Web Site in a Client- Server Environment Using Customizable Web Site Templates	2/15/00
	US	6,072,491	Method and Computer Program Product for Accessing a Web Site	6/6/00
	US	6,096,096	Web-Site Delivery	8/1/00
	US	6,098,092	Server to Dynamically Generate Graphics for the World Wide Web	8/1/00
	US	6,189,029	Web Survey Tool Builder and Result Compiler	2/13/01
	us	6,081,829	General Purpose Web Annotations Without Modifying Browser	6/27/00
	US	6,199,098	Method and Apparatus for Providing an Expandable, Hierarchical Index in a Hypertextual, Client-Server Environment	3/6/01
	US	6,012,055	Mechanism for Integrated Information Search and Retrieval from Diverse Sources Using Multiple Navigation Methods	
Graphics Rendering	us	4,772,881	Pixel Mapping Apparatus for Color Graphics Display	9/20/88
Stahting House, was	US	5,038,297	Method and Apparatus for Clearing a Region of Z-Buffer	8/6/91

### (Replacement for Schedule A of Exhibit A to

Confidential Patent Assignment - September 28, 2001) Issue Date Patent No. Country Clock Switching Circuit for Asynchronous Clocks of Graphic 3/23/93 5,197,126 Generation Apparatus US 9/13/88 Dual Clock Shift Register 4,771,279 US 8/21/90 Method for Updating Pipelined Single Port Z-Buffer by 4,951,232 Segments on a Scan Line US 12/6/88 Interleaved Pipeline Parallel Processing Architecture 4,789,927 US Method for Forming a Computer Model from an Intersection 5/12/92 5,113,490 of a Cutting Surface with a Bounded Volume US Method and Apparatus for Painting on a Computer 1/26/93 5.182.548 US Graphics Processor with Staggered Memory Timing 2/5/91 4,991,110 US 7/7/92 Graphics Processor with Staggered Memory Timing 5,129,059 US Method and Apparatus for Producing a Visually Improved 3/9/93 5,193,145 Image in a Computer System US 12/8/98 Integrated Apparatus for Displaying a Plurality of Modes of 5,847,700 Color Information on a Computer Output Display US 12/6/94 Video Timing and Display ID Generator 5.371.518 US Method and Apparatus for Generating Display Identification 4/15/97 5,621,432 US 9/24/91 Efficient Graphics Process for Clipping Polygons 5.051,737 US Apparatus and Method for Controlling Storage of Display 11/30/93 5,266,941 Information in a Computer System US Apparatus and Method for Controlling Storage of Display 2/28/95 5,394,170 Information in a Computer System US Graphical Representation of Computer Network Topology 6/16/98 5,768,552 and Activity US 12/17/96 Graphics Memory Apparatus and Method 5,585,824 US 10/6/98 Graphics Memory Apparatus and Method 5.818,433 US 4/26/94 Z-Subdivision for Improved Texture Mapping 5,307,450 US 7/20/93 Texture Range Controls for Improved Texture Mapping 5,230,039 US Method for Scan Converting Shaded Triangular Polygons 8/30/94 5,343,558 US Method for Display Rendering by Determining the Coverage 9/13/94 5,347,618 of Pixels in Polygons US 9/6/94 High Speed Cursor Generation Apparatus 5,345,252 US 11/23/93 Method and Apparatus for Accomplishing Z-Buffering by 5,265,199 Prediction US An Apparatus and Method for Integrating Texture Memory 8/20/96 5,548,709 and Interpolation Logic in a Computer System US 1/6/98 Apparatus and Method for Integrating Texture Memory and 5,706,481 Interpolation Logic in a Computer System US Antialiased Imaging with Improved Pixel Supersampling 11/4/97 5.684.939 US 6/6/00 Antialiased Imaging with Improved Pixel Supersampling 6,072,500 US 12/3/96 Method and Apparatus for Antialiasing Raster Scanned 5,581,680 images US 6/3/97 Method for Designing Curved Shapes for Use by a 5,636,338 Computer US Method and Apparatus for Rendering Volumetric Images 5/7/96 5,515,484 US Apparatus and Method for Generating Point Sample Masks 11/29/94 5,369,739 in a Graphics Display System US Processor-Based Method for Rasterizing Polygons at an 6/18/96 5,528,737 Arbitrary Precision US A Method and Apparatus for Projective Texture Mapping 9/8/98 5,805,782 Rendered from Arbitrarily Positioned and Oriented Light Source US

# (Replacement for Schedule A of Exhibit A to Confidential Patent Assignment - September 28, 2001)

	Country	Patent No.	Assignment - September 28, 2001) Title	Issue Date
		5,682,554	Apparatus and Method for Handling Data Transfer Between	10/28/97
		0,002,00	a General Purpose Computer and a Cooperating Processor	
	us			
		5,457,779	System for Accessing Graphic Data in a SIMD Processing	10/10/95
	US		Environment	0.000.00
		5,671,401	Apparatus for Efficiently Accessing Graphic Data for	9/23/97
	US		Rendering on a Display	4/21/98
		5,742,749	A Method and Apparatus for Shadow Generation Through	4121130
	US		Depth Mapping	2/6/96
		5,490,240	A System and Method of Generating Interactive Computer Graphic Images Incorporating Three Dimensional Textures	2.5.55
			Grapnic inages incorporating Three Same	
	US	F 430 854	System and Method for Sharpening Texture Imagery in	8/1/95
	un	5,438,654	Computer Generated Interactive Graphics	
	US	5,455,627	Programmable Video Output Format Generator	10/3/95
	US	5,471,572	A System and Method for Adding Detail to Textures Imager	11/28/95
	us	5,4(1,512	in Computer Generated Interactive Graphics	
	Uð	5,704,024	A Method & Apparatus for Generating Reflection Vectors	12/30/97
			Which can be Unnormalized and For Using These Reflection	
		's retition	Vectors to Index Locations on an Environment Map	
	US			7/15/97
		5,649,082	An Efficient Algorithm for Computer Texture Coordinates for	1115/91
	US		Lines & Polygons	6/18/96
		5,528,738	Method and Apparatus for Antialiasing Raster Scanned,	0/10/50
	US		Polygonal Shaped Images  Method for Sampling a Uniform Spatially-Distributed	8/8/97
		5,619,597	Sequence of Pixels in a Block	-
	US	5,710,876	A Computer Graphics System for Rendering Images Using	1/20/98
	US	5,710,070	Full Spectral Illumination Data	
	US	5,835,133	Optical System for Single Camera	11/10/98
		5,608,461	Programmable Video Frame Detector	3/4/97
	US	5,703,810	Improved DRAM for Texture Mapping	12/30/97
	US	5,943,058	Texture Mapping Circuit for Performing Data Interpolations	8/24/99
	US	0,540,000		
	US	5,982,939	System and Method for Antialiasing of Texture Edges	11/9/99
		5,844,567	Computer Graphics System and Mehod for Texture Mappir	12/1/98
	us	0,011,001	Using Triangular Interpolation	
	<u> </u>	5,819,017	Apparatus and Method for Selectively Storing Depth	10/6/98
1	us		Information of a 3-D Image	2/2/50
		5,877,771	A Method and Apparatus for Supersampling Based on the	3/2/99
	US		Local Rate of Change in Texture	6/2/98
		5,760,783	A Method and Apparatus for Providing Texture Using a Selected Portion of a Texture MIP-MAP	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
<u> </u>	US		System and Method for Color Space Conversion	10/6/98
	US	5,818,613	Appartus and Method for Accelrated Tiled Data Retrieval	4/7/98
	US	5,736,988	Appartus and Method for Accelrated Visco Bata Harachical Display List Processing in Graphics Data	8/12/97
		5,657,479	Retrieval System	-
	US	E 000 600	Computer Graphics Silhouette Load Management	8/10/99
	US	5,936,626	System and Method for Creating Visual Images of Aircraft	12/8/98
		5,845,874	Wake Vortices	
	US	6,226,003	Method for Rendering Silhouette and True Edges of 3-D	5/1/01
7-7	1 100	0,220,003	Line Drawings with Occlusion	
	US	5,946,113	System and Method for Color Space Conversion Using an	8/31/99
	US	0,040,110	Extended Color Space	
		6,147,772	System and Method for Color Space Conversion Using an	11/14/0
	US	_,,	Extended Color Space	1

## (Replacement for Schedule A of Exhibit A to

Confidential Patent Assignment - September 28, 2001) Issue Date Title Patent No. Country Syten and Computer-Based Method for Creating Real-Time 11/3/98 5,831,620 Mirror Reflections US Computational Low-Cost Anti-Aliased Bresenham Line 9/29/98 5,815,162 Aigorithm US 6/19/01 Multi-Purpose High Resolution Distortion Correction 6,249,289 US Method, System and Computer Program Product for Bump 9/7/99 5,949,424 Mapping in Tangent Space US Method, System and Computer Program Product for 3/9/99 5,880,736 Shading US Method, System and Computer Program Product for 12/19/00 6.163,319 Shading US Unified Memory Computer Architecture with Dynamic 8/15/00 6,104,417 Graphics Memory Allocation US 11/28/00 Upstream Situated Apparatus and Method within a 6,154,794 Computer System for Controlling Data Flow to a Downstream Situated Input/Output Unit US A Method and System for Efficiently Drawing Subdivision 6/20/00 6,078,331 Surfaces for 3D Graphics US Real-Time Lighting Algorithm Using 3D Texture Mapping 6/20/00 6,078,332 US A Method and System for Real Time Illumination of 1/16/01 6,175,367 Computer Generated Images US 12/14/99 System and Method for Storing and Accessing Data 6,002,406 Representative of an Object in Various Levels of Detail US Method and Apparatus for Maintaining Multiple 11/28/00 6,154,215 Representations of a Same Scene in Computer Generated Graphics US 5/2/00 Blended Texture Illumination Mapping 6.057.850 US A Platform Independent Application Program Interface for 4/10/01 6,215,495 Interactive 3D Scene Management US Method, Sytem and Computer Program Product for 8/22/00 6,108,007 Increasing Interpolation Precision Using Multi-Channel Texture Mapping US Method for Accelerating Minified Textured Cache Access 8/15/00 6.104,415 US Method for Improving Texture Locality for Pixel Quads by 5/15/01 6,232,981 Diagonal Level of Detail Calculation US Method, System and Computer Program Product for Fast 5/15/01 6,232,979 Computation Using Parallel Multi-Channel Resampling and Blending US 6/12/01 Method and Apparatus for Culling Polygons 6,246,415 US Method and System for a RISC Graphics Pipeline Optimized 5/22/01 6,236,413 for High Clock Speeds by Using Recirculation US A Packetized Command Interface to a Graphics Processor 6/13/00 6,075,546 US 5/8/01 Method and Apparatus for Performing Fast Fourier 6,230,177 Transforms US Method and Apparatus for Efficiently Switching State in a 6/26/01 6,252,610 **Graphics Pipeline** US Method and Apparatus for Calculating X to the Exponent of 10/3/00 6,128,638 US Method and System for Width Independent Antialiasing 10/17/00 6,133,901 US 7/18/00 Constant Multisample Image Coverage Mask 6,091,425 US 3/20/01 Method and Apparatus for Virtual Address Translation 6,205,531 US Apparatus and Method for Extending Computational 7/3/01 6,256,656 Precision of a Computer System Having a Modular Arithmetic Processing Unit US

# (Replacement for Schedule A of Exhibit A to

	Patent No.	Title	Issue Date
Country	6 220 547	System and Method for Rendering Multi-Planar Reformations Using Bi-Linear Interpolation	5/8/01
US US	6,268,861	Volumetric Three-Dimensional Fog Rendering Technique	7/31/01 12/19/00
US	6,163,320	Method and Apparatus for Radiometrically Accurate Texture Based Lightpoint Tendering Technique	12/19/00

		Application No.		Filing Date
	Country	196100	"Pen-Based Interface for a Notepad Computer"	11/20/98
ablet Computing	US	196114	"Pen-Based Computer System"	11/20/98
	US	130117	System and Method for the Direct Rendering of Curve	
Fraphics Rendering	US	09/005129	Bounded Objects	1/9/98
	us	191456	Floating Point Gamma Correction Method And System	11/12/98
	US	09/217398	High Precision Texture Wrapping Method And Device	12/21/98
	US	265487	Method And Device For Associating A Pixel With One Of A Plurality Of Regions In A Logarithm Or Cosine Space	3/9/99
			Method and System For Providing Texture Using A Selected Portion of a Texture Map	5/5/98
	US	072050	Improved Chroma-Key Suppression Method and	3/3/98
	US	033663	Apparatus	
	US	09/244275	Memory Chip For Use in a Unified Memory Architecture	2/3/99
	He	244261	Memory Controller for Controlling Memory in a Computer System Having a Unified Memory Architecture	2/3/99
	US		I/O Chip in a Computer System Having a Unified Memory Architecture	2/3/99
	US	244254	System and Method for Morphing Based on Multiple Weighted Parameters	12/23/98
	US	220078	A Method and System for Efficiently Evaluating and Drawing Nurbs Surfaces for 3D Graphics	4/25/97
	US	845526	System and Method for Displaying Different Portions of	
	US	899123	an Object in Different LOD Levels  System and Method for Displaying Different Portions of	
	US	070808	an Object in Different Levels of Detail Occlusion Culling For Complex Transparent Scenes in	
	US	074027	Computer Generated Graphics	5/6/98
			Method and System for Performing Rasterization in Producing Three-Dimensional Graphics Using YUV Color Space and Combining Same with Digital Video in	n 8/20/98
	US	137005	YUV Color Space	3/5/98
	US	035376	Subsampled Texture Edge Antialiasing  Method and Apparatus for Providing Image and Graphics Processing Using a Graphics Rendering	10/23/97
	US	956537	Engine  Method, System and Computer Program Product for Providing Illumination in Computer Graphics Shading	
	US	937793	and Animation  Method for Efficient Handling of Texture Cache Misse	9/25/97
	ŲS	09/048099	hy Recirculation	3/26/96
	US	09/081073	Method and Apparatus for Line Antialiasing by Gamn Corrected Area Calculation	2/ 18/20
	US	246136	System and Method for Rendering an Image	2/8/99
		09/448907	A Packetized Command Interface to a Graphics Processor	11/23/99
	US		A Packetized Command Interface to a Graphics	4/13/00
	US	09/549156 09/145516	Method and Apparatus For Rasterizing in a Hierarch Tile Order	ica 9/2/98
	US	978755	Range Correct Layered Fog Model Using 3D Texture	11/26/9
		111284	Backface Primitives Culling	7/6/98

	Country	Application No.	nment - September 28, 2001) Title	Filing Date
and the second s	US	201814	Multi-Threaded Texture Modulation for Axis Aligned Volume Rendering	12/1/98
	1 03		Multisample Dither Method With Exact Reconstruction	2/10/99
	US	247422	Method and Apparatus For Synchronizing Graphics	1/8/99
	US	09/227227	Pipelines	
	us	218121	Scaleable Network Based Computer Graphics System Computer System Having A Distributed Texture	12/21/98
	US	346071	Memory Architecture  Method and Apparatus for Radiometrically Accurate	7/1/99
	US	09/707418	Texture-Based Lightpoint Rendering Technique	11/6/00
	US	348882	Antialiasing Method Using Barycentric Coordinates Applied to Lines	7/1/99
	US	08/220596	System and Method For Transitioning Between Two Filters, Allowing For The Use of Higher Order Interpolation	12/28/98
	US	09/416055	Method, System, and Computer Program Product For Compositing True Colors and Intensity-Mapped Colors Into A Frame Buffer	10/12/99
	us	218042	System and Method For Locking Disparate Video Formats	12/22/98
	US	09/247885	Method For Interfacing to Ultra-High Resolution Output Devices	2/10/99
	US	232860	Method For Tilting Multiple Displays to Generate a Large Area Display of Moving Data	1/15/99
	US	294546	Combined Floating-Point Logic Core and Frame Buffe	4/19/99
	US	09/294450	Apparatus and Method for Sharing Antialiasing Memo Across Multiple Displays	y 4/19/99
			Transformation Pipeline for the Computing Distortion Correction Geometry for any Design Eyepoint, Display Surface Geometry and Projector Position	3/26/99
	US	277567	Antialiasing Method for Computer Graphics	3/23/99
	US	. 385270	Processor for Geometry Transformations and Lighting Calculations	12/23/98
	US	09/220156	System and Method for Maintaining Time Dependencies in Conversions That Include Parallel Operations	3/5/99
	US	263185	A Method and System for Efficiently Implementing Tv Sided Vertex Lighting in Hardware	12/20/99
	US	09/467561	Method and Apparatus for Texture Memory  Management	3/24/99
	US	275725	Method and Apparatus for Early Culling of Occluded	2/9/99
	US	09/247816	Objects  Method and System for Generating Light Values for a Control Vertices.	.1
	US	346641	Set of Vertices  Method and System for Dynamic Clock Frequency	
	US	273247	Adjustment for a Graphics Subsystem in a Computer	7 3/19/99 5/7/99
	US	306987	Fine Grain Multi-Pass for Multiple Texture Rendering  Method and System for Dynamic Texture Replication	10
	us	344005	a Distributed Memory Graphics Architecture  Cache Memory For High Latency and Out-of-Order	6/24/99
	US	345366	Return of Texture Data  Method for Virtual Clipping A Three-Dimensional	7/1/99
	us	328000	Graphics Image	6/8/99

		Country Application No. Title		
	US		A Method and System For Efficient Simplification of	
			Tetrahedral Meshes Used in 3D Volumetric Representations	2/11/00
and the state of t	- 00	09/502497	Method System and Computer Program Product for	0.000,000
	US	09/377778	Multi-Pass Bump-Mapping into an Environment Map	8/20/99
	US	328164	Method and Apparatus for a Modified Linear Filter Using Texture Data as Phase Angle	6/8/99
	US	303994	View-Dependent Layer Ordering Method and System	5/3/99
	US	300916	Method and System for Iterative Morphing	4/28/99
	US	293869	Apparatus and Method for Increasing the Bandwidth to a Graphics Subsystem	4/19/99
			Device, Method and System for Generating Per-Pixel	3/9/99
	ŲS	265493	Light Values Using Texture Parameters	0,0,00
	US	386379	Method, System, and Computer Program Product for Efficient Buffer Level Management of Memory-Buffered Graphics Data	8/31/99
			Method, System and Computer Program Product for Overlapping Graphics Data Collection and Transmission Using a Single Processor	8/31/99
	US	386378	Method System and Computer Program Product for	and the second s
	us	220082	Modified Blending Between Clip-Map Tiles	12/23/98
	US	09/369359	Reflection Space image Based Rendering	8/6/99
	_	- 20	Texture Generating Apparatus For Dynamic	44120100
	US	09/727985	Interference Checking	11/30/00
	US	09/675979	Method and System for Evaluating Derivatives in Screen Space Using Perspective Corrected Barycentr Coordinates	c 9/29/00
			Method and System for Transforming Color	7/30/99
	us	363636	Coordinates by Direct Calculation Cheap, Well-Behaved Affine Transformation of	110000
		567E7E740	Bounding Spheres	5/23/00
	US	09/576740	Dual Mode Device and Method for Generating Vector	
	US	348885	Cross Products or DOT Products	7/1/99
			System and Method for Load Balancing in a Multi-	0/20/00
	US	408951	Channel Graphics System	9/30/99
1991	US	09/404808	Method, System, and Computer Program Product for Using Alpha Values to Control Pixel Blending	9/24/99
	ric.	09/461345	Method, System, and Computer Program Product for Generating Spatically Varying Effects in a Digital Imag	e 12/15/99
	US	U3/401040	Method and Apparatus for Rendering a Quadrangle	
	US	09/565562	Primitive	5/4/00
			Reducing Fill and Improving Quality of Interlaced	6/6/01
	US	60/295854	Displays Using Multi-Sampling	4/10/01
	US	09/832138	Scene Representation Method and System  Method and System for Implementing Graphics Control	
		00/5505 40	Method and System for implementing Graphics Constructs	5/12/00
	US	09/569649	Table Indexing System and Method	5/12/00
	US	09/569650	Method and System for Accelerating Noise	5/12/00
	US	09/569521	Data Retrieval Method and System	5/12/00
	US	09/569520	Extended Range Pixel Display Method and System	5/12/00
	US	09/569654	Method, System and Computer Program Product for	
	US	09/606988	Implementing Derivative Operators with Graphics Hardware	6/29/00
			Method and System for Executing SIMD Instruction	014 5100
	us	09/638907	Using Graphics Technology	8/15/00

		Application No.	nment - September 28, 2001)	Filing Date
Country		Аррисацов но.	Method, System, and Computer Program Product for	
			Simulating Camera Depth-of-Field Effects in a Digital	
	US	09/572452	Image	5/17/00
	03	V0/012-1V4	An Efficient Graphics Pipeline With a Pixel Cache and	
	US	09/469558	Data Pre-Fetching	12/22/99
	- 00	00/100	A System and Method for Linearly Mapping a Tiled	
	US	09/470948	Image Buffer	12/22/99
		09/473209	A Graphics Geometry Cache	12/27/99
	US		View Volume Clip-Check In Object Space	12/27/99
	US	09/473210	Method, System, and A Computer Program Product Fo	
			Filtering A Texture Applied To A Surface Of A	
Anna proces	US	09/684810	Computer Generated Object	10/10/00
		03/004010	Method and System for Performing Multi-Texturing	
	US	09/599971	Operations Using Recursive Interleaving	6/21/00
		00,00001.	System and Method for Efficiently Controlling a	
	US	09/688978	Graphics Rendering Pipeline	10/17/00
			Method, System and Computer Program Product for	
			Determining Regions That Are Occluded From An	
	US	60/255883	Observation Point	12/18/00
			Method, System, and Computer Program Product for	4040100
	us	09/684812	Anistropic Filtering and Applications I nereor	10/10/00
			System, Method, and Computer Program Product For	11/30/00
	US	60/253946	General Environment Mapping	
	US	60/258323	Hardware-Accelerated Volume Lighting Algorithm	12/28/00
			Rendering Volumetric Fog and Other Gaseous	44104100
	US	60/252094	Phenomena	11/21/00
	US	60/238128	Texture Tiling With Adjacency Information	10/6/00
	A Volumetric Based Method and System for Visualizing		6(49)01	
	us	60/298416	Datasets	6/18/01
			Rendering Volumetric Fog and Other Gaseous	11/21/00
	US	60/252092	Phenomena Using an Alpha Channel	
			Method, System, and Computer Program Product for	
			Rendering Multicolored Layered Fog with Self-	11/21/00
	US	60/252093	Shadowing and Scene Shadowing	1
			Method And Apparatus For Clearing A Region Of Z-	9/13/88
	US	243789	Buffer  Method And Apparatus For Clearing A Region Of Z-	
				5/22/90
	US	527644	Buffer Clock Switching Circuit For Asynchronous Clocks Of	
				9/15/88
	US	244401	Graphics Generation Apparatus Integrated Apparatus For Displaying A Plurality Of	
			Modes Of Color Information On A Computer Output	
The state of the s		745550	Display	6/14/91
	US	715550	Video Timing And Display Id Generator	9/13/94
	US	305095	Graphical Representation Of Computer Network	
		500670	Topology And Activity	9/28/90
	US	590670	Graphical Representation Of Computer Network	
		087137	Topology And Activity	7/2/93
	US		Graphics Memory Apparatus And Method	7/22/91
	US	733313	Z-Subdivision For Improved Texture Mapping	2/19/91
	US	657325	Antialiased Imaging With Improved Supersampling	7/9/93
	US	089929	A Method And Apparatus For Generating Computer	. 1
			Graphic Images Incorporating Projected Textures	7/9/93
	US	089801	A Method And Apparatus For Interactive Generation	10
			Shadowed Scenes	7/9/93
	US	089799	OHNOMEO OCCUPA	
			System And Method For Antialiasing Of Texture Ed	ges 6/7/95
	US	472216	System And Method For Fathanson 3 4.	

	Country	Application No.	ment - September 28, 2001) Title	Filing Date
	Country	cohimen in	Unified Memory Computer Architecture With Dynamic	0/20/00
,	US	137067	Graphics Memory Allocation	8/20/98
			3D Graphics In A Computer System Having A Unified	2/3/99
	US	09/243930	Memory Architecture  Method For Accessing A Unified Memory Architecture	
	US	09/244258	In A Computer System	2/3/99
	- 03		Bus Structure For A Unified Memory Architecture in A	***
	us	09/243899	Computer System	2/3/99
	US	08/914897	System Software For Use In A Graphics Computer System Having A Shared System Memory And Supporting DM Pbuffers And Other Constructs Aliased As DM Buffers	8/20/97
AND THE RESIDENCE OF THE PARTY			System And Method For Displaying Active Uniform Network Resource Locators Embedded In A Time	9/10/99
	US	09/393250	Based Medium	10/20/98
	US	175320	Morphing Based On Multiple Weighted Parameters	10120190
	US	070809	Method, System And Computer Program Product For Providing Color Illumination In Computer Graphics Shading And Animation	5/1/98
-		204500	Method And Apparatus For Rasterizing In A Hierarchical Tile Order	7/2/98
	US	091599	Antialiasing Method For Computer Graphics	3/23/99
	US	09/274169	Littlemania merce	
		60/142547	Method, System And Computer Program Product For Multi-Pass Bump-Mapping Into An Environment Map	7/7/99
	US		Method, System, And A Computer Program Product F Filtering A Texture Applied To A Surface Of A	o 8/25/00
	US	60/227940	Computer Generated Object	10/5/01
	US	09/971,098	Texture Tiling With Adjacency Information	8/4/00
	us	09/632605	Video Card With Interchangeable Connector Module	8/4/00
	US	09/632443	System And Method For Frame Rate Matching	1
		257520	General Purpose Web Annotations Without Modifying Browser	7/19/99
nternet	US	357529	Granhical Method and System for Accessing	
	US	09/557149	Information on a Communications Network	4/25/00
		00/200550	Workstation for Processing and Producing a Video Signal	8/4/00
Digital Media	US	09/632558		014100
	US	09/632662	System and Method for Pre-Processing a Video Sign	al 8/4/00
	US	09/632452	System and Method for Producing a Video Signal	8/4/00
		09/632451	System and Method for Packing and Unpacking Vide Data	8/4/00
	US	U3/U32401	Synchronizing Motion and Time-Based Data for	
	US	08/900421	Transfer Between a Server and a Client Seamless Payback of Multiple Clips of Media Data	7/25/97
	US	09/441729	Across a Data Network	11/16/99
4			Frame-Accurate Transport of Media Data Across a D	Dat 11/16/99
	US	09/441722	Network  Backfilling Network Movie Player	2/6/98
	US	09/020072		
	us	035687	Preemptive Time Multiplexed Shared Memory Access Video Assistance System with Computer Generated	3/5/98
	US	09/427197	Imagery Overlay	10/25/9
	US	09/099742	System and Method Using a Packetized Encoded Bitstream for Parallel Compression and Decompres	sion 6/18/98
			A Method and System for Efficiently Streaming 3D Animation Across a Wide Area Network	3/6/00
1	US	09/519309	Milmaton Across a vinc Aca rection	

Country		Application No.	Title	Filing Date	
and the second s	US	09/466398	Constant Bitrate Algorithm for Block Based Image Compression	12/17/99	
	US	09/539365	System and Method for Communicating Video Data in Digital Media Device	a 3/31/00	
	US	09/577171	Cost-Optimal Convolution Algorithm With Low or Null Latency	5/23/00	
The state of the s	US	09/544360	A Technique For Controlling Media Data Streams Usin Embedded Controls	4/6/00	
The second secon	US	09/521234	Apparatus and Method for Recognizing Color Space of a Digital Video Input	f 3/8/00	
	US	09/628796	System and Method for Compressing Data	7/28/00	
	US	09/628658	System and Method for Storing Compressed Data ont a Storage Medium	7/28/00	
	US	60/281105	Method and Apparatus for Producing Digital Video from a General Digital Graphics Interface	n	

# CORRECTION TO CONFIDENTIAL PATENT ASSIGNMENT

This CORRECTION TO CONFIDENTIAL PATENT ASSIGNMENT ("Correction") is between Silicon Graphics, Inc., a Delaware Corporation ("SGI"), and Microsoft Corporation, a Washington Corporation ("Microsoft").

WHEREAS, SGI and Microsoft entered into various patent agreements, including a CONFIDENTIAL PATENT ASSIGNMENT dated September 28, 2001 ("Assignment") and a CONFIDENTIAL PATENT AGREEMENT dated September 28, 2001 ("Patent Agreement"); and

WHEREAS, the Assignment contained certain errors that the parties seek to correct; NOW, THEREFORE, SGI and Microsoft agree as follows:

- 1. Schedule A of Exhibit A to the Assignment is hereby, *nunc pro tunc*, modified as follows:
  - (a) U.S. Patent No. 6,131,189 ("the '189 patent"), U.S. Patent No. 5,907,962 ("the '962 patent") and U.S. Patent Application No. 09/415,037 ("the '037 application") are stricken from Schedule A of Exhibit A to the Assignment; and
  - (b) the U.S. and international patent applications identified on Exhibit 1 attached hereto are added to Schedule A of Exhibit A to the Assignment.
- 2. Schedule A of Exhibit A to the Assignment is replaced, *nunc pro tunc*, by Exhibit 2 hereto.
- 3. The parties acknowledge that this Correction does not affect any other representation, warranty, forbearance, license, covenant or obligation undertaken or made in the Patent Agreement. Thus, by way of example, the licenses, covenants and other rights granted by SGI to Microsoft and Microsoft's Authorized Licensees pursuant to the Patent Agreement shall be applicable to the '189 patent, the '962 patent and the '037 application.
- 4. Except for the foregoing, this Correction shall not contradict or vary the terms of the Assignment, Patent Agreement or any other agreement between the parties. No additional licenses, express or implied, are granted by this Correction.

IN WITNESS WHEREOF, the parties hereto have caused this Correction To Confidential Patent Assignment to be made and executed by duly authorized officers as of the dates and years indicated herein below.

Agreed to:	Agreed to:
SILICON GRAPHICS, INC.	MICROSOFT CORPORATION
By: Sandra Escher	By:
Name: Sandra Escher	Name: DANIEZ D. CROUSE
Title: General Counsel	Title: DEMON GEN COUSER - ASSIT SERVERY
Date: March 26, 2002	Date: 3/28/2002

### Exhibit 2 - Foreign Patents and Applications (Replacement for Schedule A of Exhibit to Confidential Patent Assignment - September 28, 2001)

		Title	Foreign Filing Date	Issue Date	Status
Country	Appl/Patent No.				
		Method, System And Computer Program Product For Providing Illumination In Computer Graphics Shading And	and the state of t		
			9/25/98		Abandoned
EPO	98949509.8	Animation Method, System And Computer Program Product For			
		Providing Illumination In Computer Graphics Shading And			Manadina.
		Animation	9/25/98		Pending
Japan	2000-513245	Method, System And Computer Program Product For			
		Providing Illumination In Computer Graphics Shading And			Pending
		Animation	9/25/98		retoring
PCT	US98/20096	Method And Apparatus For Rasterizing In A Hierarchical Tile			Pending
_	99942475.7	Order	5/17/00		and the second of the second of the
France	899424.0	Method And Apparatus For Rasterizing In A Hierarchical Tile	e:0100		Pending
1	2000-568059	Order	6/2/00		
Japan	2000	Method And Apparatus For Rasterizing In A Hierarchical Tite	8/23/99		Pending
DCT	US99/19353	Order	6123199		
PCT		Method And Apparatus For Rasterizing In A Hierarchical Tile	5/17/00		Pending
UK	99942475.7	Order	3117709		
<u> </u>		kt_ Ptilines	7/11/01		Pending
EPO	903207.9	Method And Apparatus For Synchronizing Graphics Pipelines	(11101		
L1 V	_i				Pending
Japan	2000/592791	Method And Apparatus For Synchronizing Graphics Pipelines			
	٦	F. O. shanisian Cranhics Pinolines	1/7/00		Pending
PCT	U\$00/00549	Method And Apparatus For Synchronizing Graphics Pipelines	4/19/00		Pending
PCT	US00/10634	Combined Floating-Point Logic Core And Frame Buffer			
		T- Tark in Hamon, Management	3/24/00		Pending
PCT	US00/107904	Method And Apparatus For Texture Memory Management			
		Apparatus And Method For Increasing The Bandwidth To A	4/19/00		Pending
PCT	US00/10379	Graphics Subsystem  Device, Method And System For Generating Per-Pixel Light			
		Device, Method And System For Generaling Personal Light Values Using Texture Parameters	3/8/00		Abandoned
PCT	US00/06184	Values Using Texture Program Product For			
		Method, System And Computer Program Product For Overlapping Graphics Data Collection And Transmission Usi	ď		Dondina
		A Single Processor	8/31/00		Pending
PCT	US00/40786	Method, System And Computer Program Product For Modifi	ed		Pending
	US99/29984	Blending Between Clip-Map Tiles	12/17/99	1	renowing
PCT	0238158304				Abandoned
	US00/21361	Workstation For Processing And Producing A Video Signal	8/4/00		Abandoned
PCT		System And Method For Pre-Processing A Video Signal	8/4/00		Abandoned
PCT	US00/21362	System And Method For Producing A Video Signal	8/4/00		Apandoned
PCT	US00/21363				Abandoneo
	11000000000	System And Method For Packing And Unpacking Video Dat	a 8/4/00	,,,	
PCT	US00/21360	Preemptive Time Multiplexed Shared Memory Access	3/2/99		Pending
EPO	99909763.7	Preemptive Time Multiplexed Shared Memory Access	3/2/99		Pending
Japan	2000-534947	Preemptive Time Multiplexed Shared Memory Access	3/2/99		Pending
PCT	US99/04615	Preemptive time multiplexed shared mental)	7/26/01		Pending
PCT	US01/23421	System And Method For Compressing Data			T
	nametric.	System And Method For Storing Compressed Data Onto A	7/27/01		Pending
PCT	US01/23419	Storage Medium		10/15/91	Granted
Canada	1290870	Pixel Mapping Apparatus For Color Graphics		11/27/97	Granted
Germany	DE3736195	Pixel Mapping Apparatus For Color Graphics		6/3/93	Granted
Hong Kong	527	Pixel Mapping Apparatus For Color Graphics		4/16/99	Granted
Japan	2913096	Pixel Mapping Apparatus For Color Graphics		12/26/91	Granted
	87/24844.9	Pixel Mapping Apparatus For Color Graphics		5/29/91	Granted
Singapore	2198319	Pixel Mapping Apparatus For Color Graphics			Granted
UK	172327	Dual Clock Shift Register		5/27/94	Charnon
India	112321	Method For Updating Pipelined Single Port Z-Buffer By		5/29/96	Granted
rn0	433373	Segments On A Scan Line		2129190	3,5,7,00
EPO	400010	Method For Updating Pipelined Single Port Z-Buffer By		5/29/96	Granted
	433373	Segments On A Scan Line	1	JI ZBIBO	

### Exhibit 2 - Foreign Patents and Applications (Replacement for Schedule A of Exhibit to Confidential Patent Assignment - September 28, 2001)

			Foreign Filing Date	Issue Date	Status
Country	Appl/Patent No.	Title	Date	12206 Date	
		Method For Updating Pipelined Single Port Z-Buffer By		5/29/96	Granted
Germany	DE68926571	Segments On A Scan Line			
	***************************************	Method For Updating Pipelined Single Port Z-Buffer By		2/12/99	Granted
Japan	2884250	Segments On A Scan Line			
		Method For Updating Pipelined Single Port Z-Buffer By		12/4/97	Granted
Korea	131820	Segments On A Scan Line			
		Method For Updating Pipelined Single Port Z-Buffer By		5/29/96	Granted
Switzerland	433373	Segments On A Scan Line		11/13/90	Granted
Canada	1276312	Interleaved Pipeline Parallel Processing Architecture			
		An Apparatus And Method For Integrating Texture Memory	3/7/95		Pending
EPO	95912783.8	And Interpolation Logic In A Computer System  An Apparatus And Method For Integrating Texture Memory			
		An Apparatus And Memod For Integrating Texture Memod For Integrati	3/7/95		Abandoned
PCT	US95/02853	An Apparatus And Method For Integrating Texture Memory		- manager proper basis to the second	
		And Interpolation Logic in A Computer System	3/7/95		
JP	9510309	Apparatus And Method For Selectively Storing Depth			
	*******	Information Of A 3-D Image	8/15/95		Abandoned
EPO	96928193	Apparatus And Method For Selectively Storing Depth			
	11000140045	Information Of A 3-D Image	8/15/95		Abandoned
PCT	US96/13245	A Method And Apparatus For Providing Texture Using A			
	96939541.7	Selected Portion Of A Texture Mip-Map	11/6/96		Abandoned
EPO	90938341.1	A Method And Apparatus For Providing Texture Using A			8 to
207	US96/17673	Selected Portion Of A Texture Mip-Map	11/6/96		Abandoned
PCT	0030111010	System And Method For Color Space Conversion Using An			Abandoned
EPO	97917591.6	Extended Color Space	3/28/97	<u> </u>	Abandoned
EFO		System And Method For Color Space Conversion Using An			Abandoned
PCT	US97/04691	Extended Color Space	3/28/97		Abandoned
		Unified Memory Computer Architecture With Dynamic	- 10.10.7	-	Pending
Canada	2214868	Graphics Memory Allocation	9/9/97		
Canada		Unified Memory Computer Architecture With Dynamic	0/5/07		Pending
EPO	97306897.6	Graphics Memory Allocation	9/5/97	-	
		Unified Memory Computer Architecture With Dynamic	9/16/97		Pending
Japan	251134.97	Graphics Memory Allocation	3/10/3/		-
		Unified Memory Computer Architecture With Dynamic	8/26/97		Pending
Mexico	976495	Graphics Memory Allocation	7/1/99	<del>                                     </del>	Abandoned
PCT	US99/15075	Method And Apparatus For Virtual Address Translation	171100		
		Strooms	8/26/99		Abandoned
PCT	US99/19502	System and Method for Combining Multiple Video Streams			
			8/18/92		Abandoneo
PCT	US96/6946	Digital Filtering for Lenticular Printing			
		Digital Filtering for Lenticular Printing	8/18/92	1	Abandone
AU	9225465	Method and Apparatus for Clearing a Region of Z-Buffer	9/12/89		Abandoned
PCT	U\$89/3924	Method and Apparatus for Clearing a Region of Z-Buffer	9/12/89	2/7/96	Abandone
EP	551251	Method and Apparatus for Clearing a Region of Z-Buffer	9/12/89	3/21/96	Abandone
DE	68925651	Method and Apparation	published		
	1	Graphics Processor with Staggered Memory Timing	3/22/1990		Abandone
PCT	WO90/02991	Method and Apparatus for Producing a Visually Improved	published		
	WO91/12588	Image in a Computer System	8/22/1991		Abandone
PCT	VVO91/12000	Method and Apparatus for Producing a Visually Improved	published	and the same of th	
114	9173134	Image in a Computer System	9/3/1991		Abandone
AU	3110104	Computer System Having A Distributed Texture Memory			D #
nor	US00/16745	Architecture	6/16/00		Pending
PCT	5000:10:39				,
Erana	89910803.9	Method And Apparatus For Clearing A Region Of Z-Buffer	9/12/89	2/7/96	
France					
Great Britain	89910803.9	Method And Apparatus For Clearing A Region Of Z-Buffer	9/12/89	2/7/96	
OISAL DIRBRI	1	Method For Updating Pipelined Single Port Z-Buffer By		FIGNIOS	
Switzerland	89910565.4	Segments On A Scan Line	9/11/89	5/29/96	1

### Exhibit 2 - Foreign Patents and Applications (Replacement for Schedule A of Exhibit to Confidential Patent Assignment - September 28, 2001)

Country	Appl/Patent No.	Title	Foreign Filing Date	Issue Date	Status
WO	89910710.6	Graphics Processor With Staggered Memory Timing	9/12/89		
DE	P4232144.1-53	Integrated Apparatus For Displaying A Plurality Of Modes Of Color Information On A Computer Output Display	9/25/92		
GB	9218986.9	Integrated Apperatus For Displaying A Plurality Of Modes Of Color Information On A Computer Output Display	9/8/92	3/26/97	
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JP	180466/94	A Method And Apparatus For Generating Computer Graphic Images Incorporating Projected Textures	7/11/94		erine interes in the St.
JP	180467/94	A Method And Apparatus For Interactive Generation Of Shadowed Scenes	7/11/94		· · · · · · · · · · · · · · · · · · ·
EP EP	99907170.7	Subsampled Texture Edge Antialiasing	2/23/99		
JP	2000-534973	Subsampled Texture Edge Antialiasing	2/23/99	<u> </u>	
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EΡ	00916656.2	Method And Apparatus For Texture Memory Management	3/24/00 8/4/00		
wo	US00/21356	Video Card With Interchangeable Connector Module	0/4/00		
WO	US00/21367	System And Method For Frame Rate Matching	<u> </u>		<del>,</del>

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