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IN THE UNITED STATES

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101640796

Box Assignments
Commissioner of Patents and Trademarks
Washington, D.C. 20231

2-15-01

ASSIGNMENT (DOCUMENT) COVER SHEET (37 C.F.R. § 3.31)

Attached please find an assignment (document) for recordal.

**Identification of Application(s) and/or Patent(s) for Assignment Recordal
(37 CFR § 3.21 and 37 CFR § 3.31 (a)(4))**

1. This assignment is for the patent applications and/or issued patents shown on the attached list of FURTHER APPLICATION(S) and/or PATENT(S) BEING ASSIGNED.

Number of pages added 3

Total Number of Applications and/or Patents and Total Fee

2. A. The total number of applications and/or patents identified in this cover sheet is 43.

B. The total fee is (37 CFR § 1.21(h))

43 X \$40.00 = \$ 1,720

C. Payment of fee is made by:

Please charge Account 50-0749 the sum of \$1,720.

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Statement of Mailing

I hereby certify that, on the date shown below, this correspondence is being deposited with the United States Postal Service in an envelope addressed to the Assistant Commissioner for Patents, Box M Fee, Washington, DC 20231 with sufficient postage as first class mail.

Date: FEB 12, 2001

Signature

Kelli J. Withrow

Name of Party(ies) Conveying Interest
(37 CFR § 3.31(a)(1))

3. The parties conveying interest is MITSUBISHI ELECTRIC RESEARCH LABORATORIES, INC. formerly known as MITSUBISHI ELECTRIC INFORMATION TECHNOLOGY CENTER AMERICA, INC.

Name and Address of Party(ies) Receiving Interest
(37 CFR § 3.31(a)(2))

4. The rights are being conveyed to TERARECON, INC. with an address at 2955 Campus Drive, Suite 325, San Mateo, California 94403.

Description of Interest Conveyed or Transaction Recorded

5. The accompanying document intends to accomplish an Assignment.

Name and Address of Party to Whom Correspondence Should be Mailed

6. Please address correspondence to:

Patent Department
Mitsubishi Electric Research Laboratories, Inc.
201 Broadway
Cambridge, Massachusetts 02139

Tel. No. (617) 621-7539

Date Assignment (Document) Executed

7. The attached assignment (document) was executed by Mitsubishi Electric Research Laboratories, Inc. on February 2, 2001.

Language of Assignment (Document) to be Recorded

8. The attached document is in the English language.

Original Document or True Copy Submitted

9. Submitted herewith is the original document.

Statement and Signature

10. 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.

Date: 2/2/2001

Reg. No.: 35,460

Tel. No. (617) 621-7539

Customer No. 22199



Signature of Practitioner

Dirk Brinkman

Mitsubishi Electric IFA, Inc.
201 Broadway, 8th Floor
Cambridge, MA 02139

Total Number of Pages Being Submitted

12. The total number of pages being submitted, including cover sheet attachment(s) and documents are:

10 pages
Total number of pages submitted

FURTHER APPLICATION(S) and/or PATENT(S) BEING ASSIGNED

Docket No.	Serial No.	Filing Date	Title
VGO-100	09/315,742	05/20/1999	Volume Rendering Integrated Circuit
VGO-101	09/059,155	04/13/1998	Parallel Volume Rendering System with Resampling Module for Parallel and Perspective Projections
VGO-106	09/315,661	05/20/1999	Method and Apparatus for Illuminating Volume Data in a Rendering Pipeline
VGO-109	09/190,634	11/12/1998	Fast Storage and Retrieval of Intermediate Values in a Real-Time Volume Rendering System
VGO-111	09/410,770	10/01/1999	Voxel and Sample Pruning in a Parallel Pipelined Volume Rendering System
VGO-113	09/219,059	12/22/1998	Method and Apparatus for Volume Rendering with Multiple Depth Buffers
VGO-115	09/191,865	11/12/1998	Two-Level Mini-Block Storage System for Volume Data Sets
VGO-116	09/190,303	11/12/1998	Incrementally Calculated Cut-Plane Region for Viewing a Portion of a Volume Data Set in Real-Time
VGO-117	09/190,645	11/12/1998	Pipelined Cropping for Manipulating Volume Data Sets in Real Time
VGO-118	09/190,712	11/12/1998	Super-Sampling and Gradient Estimation in a Ray-Casting Volume Rendering System
VGO-119	09/190,332	11/12/1998	Three-Dimensional Cursor for a Real-Time Volume Rendering System
VGO-120	09/353,673	07/15/1999	Method and Apparatus for Mapping Samples in a Rendering Pipeline
VGO-122	09/410,771	10/01/1999	Early Ray Termination in a Parallel Pipelined Volume Rendering System
VGO-123	09/409,643	10/01/1999	Space Leaping in a Parallel Pipelined Volume Rendering System

Docket No.	Serial No.	Filing Date	Title
VGO-124	09/315,430	05/20/1999	Volume Rendering Graphics Board
VGO-125	09/315,178	05/20/1999	Volume Rendering Pipeline
VGO-128	09/315,401	05/20/1999	A Memory Storing Voxel Data Interfaced to Rendering Pipelines
VGO-129	09/315,920	05/20/1999	State Machine for Controlling Voxel Memory
VGO-130	09/315,176	05/20/1999	Method and Apparatus for Translating and Interfacing Voxel Memory Addresses
VGO-131	09/315,400	05/20/1999	Rendering a Partitioned Volume Data Set
VGO-132	09/316,122	05/20/1999	Method and Apparatus for Modulating Lighting with Gradient Magnitude of Volume Data in a Rendering Pipeline
VGO-133	09/315,659	05/20/1999	Method and Apparatus for Approximating a Function
VGO-134	09/315,177	05/20/1999	Method for Modulating Volume Samples with Gradient Magnitude Vectors and Step Functions
VGO-135	09/315,238	05/20/1999	Method for Modulating Volume Samples Using Gradient Magnitude and Complex Functions Over a Range of Values
VGO-136	09/315,264	05/20/1999	Method and Apparatus for Mapping Reflectance While Illuminating Volume Data in a Rendering Pipeline
VGO-137	09/315,263	05/20/1999	Method and Apparatus for Applying Modulated Lighting to Volume Data in a Rendering Pipeline
VGO-138	09/315,927	05/20/1999	Method and Apparatus for Classifying Intensity Values of Volume Data Using a Reconfigurable Look-up Table
VGO-139	09/409,642	10/01/1999	Ray Aligned Sections in a Parallel Pipelined Volume Rendering System
VGO-140	09/353,679	07/15/1999	Configurable Volume Rendering Pipeline

Docket No.	Serial No.	Filing Date	Title
VGO-142	09/353,881	07/15/1999	Method and Apparatus for Classifying Samples in a Rendering Pipeline
VGO-143	09/353,680	07/15/1999	Method and Apparatus for Generating a Histogram of a Volume Data Set
VGO-144	09/353,882	07/15/1999	Multi-pass Volume Rendering Pipeline
VGO-146	09/679,316	10/04/2000	Method and Apparatus for Correcting Opacity Values in a Rendering Pipeline
VGO-147	09/409,649	10/01/1999	Controller for a Parallel Pipelined Volume Rendering System
VGO-148	09/678,550	10/04/2000	Volume Rendering in XY-Image Order
VGO-148A	09/715,398	11/17/2000	Methods for Correcting Gradients of Irregular Spaced Graphic Data
VGO-149	09/679,315	10/04/2000	Controller for Rendering Pipelines
VGO-150	09/679,248	10/04/2000	Synchronized Command Queues for a Rendering Pipeline
VGO-151	09/679,247	10/04/2000	Rendering Memory in a Volume Rendering System
MERL-1138B	09/318,344	05/25/1999	Volume Rendering Pipelines
MERL-1138C	09/318,430	05/25/1999	Method for Rendering Sections of A Volume Data Set
MERL-1138D	09/320,365	05/25/1999	Method for Rendering Miniblocks of A Volume Data Set

Docket No.	Patent No.	Grant Date	Title
MERL-1138	6,008,813	12/28/1999	Real-Time PC Based Volume Rendering System

Exhibit A

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