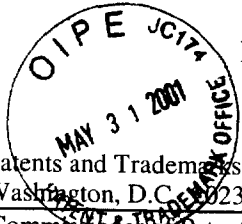


06-08-2001

U.S. Department of Commerce
Patent and Trademark Office

5-31-01



REC

101744589
PATENTS ONLY

Our Ref.: 723-953

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

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Matthew Komsthoeft
K. Michael Ockenden
Yoshitaka Yasumoto
Kazuki Hirose

2. Name and address of receiving party(ies):

Name: Nintendo Co., Ltd.
Internal Address: _____
Street Address: 11-1, Kamitoba-hokotate-cho
Minami-ku _____City: Kyoto
State/Country: Japan
Zip: 601-8501Additional name/s of conveying party/ies attached? ☐

3. Nature of conveyance:

☒ Assignment ☐ Merger
☐ Security Assignment ☐ Change of Name
☐ Other _____Execution Date: 2/20/2001; 4/18/2001; 3/7/2001;
3/12/2001Additional name/s & address/es attached? ☐ Yes ☒ No

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: _____

A. Patent Application No(s).

(1) 09/722,421
(2) 60/227,006
(3) _____

B. Patent No(s).

(1) _____
(2) _____
(3) _____Additional numbers attached ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Robert W. Faris
Internal Address: _____
Street Address: Nixon & Vanderhye P.C.
1100 North Glebe Road
8th Floor
City: Arlington State: VA Zip: 22201

6. Total number of applications & patents involved: 2

7. Total fee (37 CFR 3.41) \$ 80.00
☒ Enclosed
☐ Authorized to be charged to deposit account #14-1140

8. The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper thereafter filed in this application by this firm) to our Account No. 14-1140.

DO NOT USE THIS SPACE

9. Statements 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.

Robert W. Faris

Name of Person Signing

Reg. No. 31,352

Signature

May 31, 2001

Date

Total number of pages including original cover sheet, attachments, and document: [7]

ASSIGNMENT FOR PATENT APPLICATIONS
(All Rights)

WHEREAS I, Matthew Komsthoeft (hereinafter ASSIGNOR), of 2601 Cortez Dr., #28, Santa Clara, California 95051 have, with others, made an invention for which a provisional patent application entitled "SHADOW MAPPING IN A LOW COST GRAPHICS SYSTEM" was filed in the United States Patent and Trademark Office on August 23, 2000 under Serial No. 60/227,006, and for which a utility patent application entitled "SHADOW MAPPING IN A LOW COST GRAPHICS SYSTEM" was filed in the United States Patent and Trademark Office on November 28, 2000 under Serial No. 09/722,421.

WHEREAS, Nintendo Co., Ltd. (hereinafter "Nintendo"), a corporation of the country of Japan, having an office and place of business at 11-1, Kamitoba-hokotate-cho, Minami-ku, Kyoto, Japan 601-8501 is desirous of acquiring full ownership interest therein;

NOW, THEREFORE, in consideration of ASSIGNOR'S employment with ArtX Inc. ("ArtX") and/or ATI Technologies Corp. ("ATI"), in consideration of certain agreements between ArtX, ATI and Nintendo, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto NINTENDO, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other

international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to NINTENDO, for its interest as NINTENDO, its successors, assigns, and legal representatives. It is understood and agreed that NINTENDO'S attorneys Nixon & Vanderhye P.C. have represented only NINTENDO and will continue to represent only NINTENDO with respect to this invention;


ASSIGNOR hereby agrees to execute any papers by NINTENDO, its successors, assigns, and legal representatives, deemed essential to NINTENDO'S full protection and title in and to the invention hereby transferred; and

ASSIGNOR hereby agrees, upon request of NINTENDO, and without further remuneration, to execute any and all papers desired by NINTENDO, for the filing and granting of foreign applications and the perfecting of title thereto in NINTENDO.

AGREED and executed as noted below:

2-20-2001

Date



Matthew Komsthoef

ASSIGNMENT FOR PATENT APPLICATIONS
(All Rights)

WHEREAS, we, K. Michael Ockenden, Yoshitaka Yasumoto, Kazuki Hirose, (hereinafter ASSIGNORS) of Vancouver, BC Canada; Osaka, Japan; and Bellevue, Washington, respectively, have, with others, made an invention for which a provisional patent application entitled "SHADOW MAPPING IN A LOW COST GRAPHICS SYSTEM" was filed in the United States Patent and Trademark Office on August 23, 2000 under Serial No. 60/227,006, and for which a utility patent application entitled "SHADOW MAPPING IN A LOW COST GRAPHICS SYSTEM" was filed in the United States Patent and Trademark Office on November 28, 2000 under Serial No. 09/722,421;

WHEREAS, Nintendo Co., Ltd. (hereinafter "Nintendo"), a corporation of the country of Japan, having an office and place of business at 11-1, Kamitoba-hokotate-cho, Minami-ku, Kyoto, Japan 601-8501 is desirous of acquiring full ownership interest therein;

NOW, THEREFORE, in consideration of ASSIGNORS' employment with Nintendo and/or its subsidiaries and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNORS by these presents hereby sell, assign, and transfer unto NINTENDO, its successors, assigns, and legal representatives, ASSIGNORS' entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid applications, and to the said applications and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said applications, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other

international agreements to which the United States of America adheres, and the ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to NINTENDO, for its interest as NINTENDO, its successors, assigns, and legal representatives. It is understood and agreed that NINTENDO'S attorneys Nixon & Vanderhye P.C. have represented only NINTENDO and will continue to represent only NINTENDO with respect to this invention;

ASSIGNORS hereby agree to execute any papers by NINTENDO, its successors, assigns, and legal representatives, deemed essential to NINTENDO'S full protection and title in and to the invention hereby transferred; and

ASSIGNORS hereby agree, upon request of NINTENDO, and without further remuneration, to execute any and all papers desired by NINTENDO, for the filing and granting of foreign applications and the perfecting of title thereto in NINTENDO.

AGREED and executed as noted below:

Apr. 18/2001

Date

K. Michael Ockenden

K. Michael Ockenden

Date

Yoshitaka Yasumoto

Yoshitaka Yasumoto

Date

Kazuki Hirose

Kazuki Hirose

ASSIGNMENT FOR PATENT APPLICATIONS
(All Rights)

WHEREAS, we, K. Michael Ockenden, Yoshitaka Yasumoto, Kazuki Hirose, (hereinafter ASSIGNORS) of Vancouver, BC Canada; Osaka, Japan; and Bellevue, Washington, respectively, have, with others, made an invention for which a provisional patent application entitled "SHADOW MAPPING IN A LOW COST GRAPHICS SYSTEM" was filed in the United States Patent and Trademark Office on August 23, 2000 under Serial No. 60/227,006, and for which a utility patent application entitled "SHADOW MAPPING IN A LOW COST GRAPHICS SYSTEM" was filed in the United States Patent and Trademark Office on November 28, 2000 under Serial No. 09/722,421;

WHEREAS, Nintendo Co., Ltd. (hereinafter "Nintendo"), a corporation of the country of Japan, having an office and place of business at 11-1, Kamitoba-hokotate-cho, Minami-ku, Kyoto, Japan 601-8501 is desirous of acquiring full ownership interest therein;

NOW, THEREFORE, in consideration of ASSIGNORS' employment with Nintendo and/or its subsidiaries and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNORS by these presents hereby sell, assign, and transfer unto NINTENDO, its successors, assigns, and legal representatives, ASSIGNORS' entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid applications, and to the said applications and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said applications, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other

international agreements to which the United States of America adheres, and the ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to NINTENDO, for its interest as NINTENDO, its successors, assigns, and legal representatives. It is understood and agreed that NINTENDO'S attorneys Nixon & Vanderhye P.C. have represented only NINTENDO and will continue to represent only NINTENDO with respect to this invention;

ASSIGNORS hereby agree to execute any papers by NINTENDO, its successors, assigns, and legal representatives, deemed essential to NINTENDO'S full protection and title in and to the invention hereby transferred; and

ASSIGNORS hereby agree, upon request of NINTENDO, and without further remuneration, to execute any and all papers desired by NINTENDO, for the filing and granting of foreign applications and the perfecting of title thereto in NINTENDO.

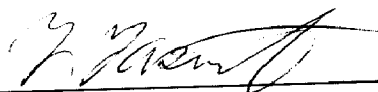
AGREED and executed as noted below:

Date

3 / 7 / 2001

Date

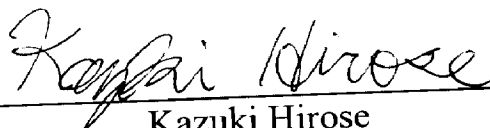
K. Michael Ockenden



Yoshitaka Yasumoto

3 / 12 / 2001

Date



Kazuki Hirose