Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.
Office Action Summary

--- The MAILING DATE of this communication appears on the cover sheet with the correspondence address ---

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 16 April 2004.
2a) □ This action is FINAL. 2b) ☒ This action is non-final.
3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-32 is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) □ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-32 is/are rejected.
7) □ Claim(s) _____ is/are objected to.
8) □ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) □ The specification is objected to by the Examiner.
10) □ The drawing(s) filed on _____ is/are: a) □ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) □ All  b) ☐ Some *  c) ☐ None of:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____.
   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) □ Notice of Draftsperson's Patent Drawing Review (PTO-946)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
4) □ Interview Summary (PTO-413)
   Paper No(s)/Mail Date: ______.
5) □ Notice of Informal Patent Application
6) □ Other: ______.
Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-10, 13-19, 21-26, and 29-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Gauthier et al., US 20040012594 A, hereinafter Gauthier.

Claim 1.

Gauthier teaches a method for manipulating an image transformation over time, comprising (i.e. noted in [0002], generating of animation data for animating a character):

Gauthier teaches selecting a source image from a first frame of a video clip (i.e. noted in [0074] and shown in fig. 7 frame 1 is selected); Gauthier teaches determining a first animation axis that defines a first two-dimensional transformation of the source image in the video clip over time (i.e. noted from frames 1-5, also in [0080], number of frames per unit of time); Gauthier teaches selecting a destination image (i.e. noted in figs. 7-8 as the destination image “walk”, “run”, an “jump” are selected), that the source image will transform into, from a second frame of the video clip (i.e. noted in figs. 7-8 the “walk” mode starts from the second frame); Gauthier teaches determining a second animation axis that defines a second two-dimensional transformation (i.e. noted in fig. 7 the first animation in the second frame is the walking mode, and the second animation in the third frame is shown a different animation, e.g., jumping that is considered as the transformation in a vertical axis) of the destination image in the video clip
over time (i.e. noted in fig. 8); Gauthier teaches manipulating a transformation of the source image (i.e. noted in [0125], steps 1503 and 1504 provide a transformation angle and axis) to the destination image by manipulating the second axis (i.e. noted in [0124]).

Claim 2.

Gauthier teaches the method of claim 1, further comprising: displaying a schematic hierarchical representation of the source image, the first axis, the destination image, and the second axis, wherein the first axis is a parent of the source image and the second axis is a parent of the destination image; displaying a first connector, in the schematic representation, connecting the source image and the first axis; and displaying a second connector, in the schematic representation, connecting the destination image and the second axis (i.e. noted in [0005], that any such character is traditionally defined as a biomechanical model comprising a hierarchy of parent and children nodes).

Claim 3.

Gauthier teaches the method of claim 2, wherein the manipulating is performed in the schematic hierarchical representation by: selecting the second axis; and modifying properties of the second axis (i.e. noted in paragraphs [0004-0006]).

Claim 5.

Gauthier teaches the method of claim 1, wherein: the manipulating comprises rotating the second axis; and the rotating causes all of the points in the destination image to warp in accordance with the rotation (i.e. noted in fig. 7 ref.# 703).

Claim 6.
Gauthier teaches the method of claim 1, wherein: the manipulating comprises scaling the second axis; and the rotating causes all of the points in the destination image to warp in accordance with the scaling (i.e. noted in fig. 7 ref.# 704).

Claim 7.

Gauthier teaches the method of claim 1, wherein: the manipulating comprises translating the second axis; and the rotating causes all of the points in the destination image to warp in accordance with the translating (i.e. noted in fig. 7 ref.# 702).

Claim 8.

Gauthier teaches the method of claim 1, wherein the second transformation is defined by multiple two-dimensional transforms represented by multiple axis (i.e. noted in [0124], 3-D).

Claim 9.

Gauthier teaches the method of claim 1, wherein the manipulating comprises modifying a point in the second axis to adjust the transformation to the destination image (i.e. noted in [0095], correcting the artifact).

Claim 10.

Gauthier teaches the method of claim 1, wherein the manipulating comprises realigning the second axis with the source image (i.e. noted in [0102], also see in fig. 11).

Claims 13-16 are rejected with similar reason as set forth in claim 1, above.

Claim 17 is rejected with similar reason as set forth in claim 1, above.

Claim 18 is rejected with similar reason as set forth in claim 2, above.

Claim 19 is rejected with similar reason as set forth in claim 3, above.

Claim 21 is rejected with similar reason as set forth in claim 5, above.
Claim 22 is rejected with similar reason as set forth in claim 6, above.
Claim 23 is rejected with similar reason as set forth in claim 7, above.
Claim 24 is rejected with similar reason as set forth in claim 8, above.
Claim 25 is rejected with similar reason as set forth in claim 9, above.
Claim 26 is rejected with similar reason as set forth in claim 10, above.
Claims 29-31 are rejected with similar reason as set forth in claim 1, above.
Claim 32.

Gauthier teaches in fig. 7, the apparatus of claim 31, wherein the video editing application is further configured to animate the mapping over time (i.e. noted in fig. 7 animated from frame 1 to frame 5) by mapping the first sample point from the source image (i.e. noted in fig. 7 mapping the first sample point i.e. node #1 from the source in frame #1) to a third sample point on the destination point at a second point in time (i.e. noted in the same figure in frames 2 and 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier, and in view of Haga et al. US 20010040575 A1, hereinafter Haga.
Claim 4.

Gauthier does not explicitly specify manipulating is performed by manipulating a graphical representation of the second axis that is superimposed over the destination image.

However, Haga teaches manipulating is performed by manipulating a graphical representation of the second axis that is superimposed over the destination image (i.e. noted in paragraph [0222], e.g. the characters 304 in FIG. 60 are superposed on the transparent background portion of FIG. 59).

Thus, it would have been obvious to a person skill in the art at the time of the invention to combine Haga into Gauthier, in order to provide images (manipulated graphical representation of the second axis that superimposed over the destination image) that are easier for players to see by suitably controlling the angle of the virtual camera relaying the developing situation in a game or the orientation of objects situated in the game field.

Claim 20 is rejected with similar reason as set forth in claim 4, above.

Claims 11, 12, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier et al., US 20040012594 A, hereinafter Gauthier.

Claim 11.

Gauthier teaches (see the rejection of claim 1 for cited claimed features, except the underlined terminologies) a method for manipulating an image transformation over time, comprising: (a) selecting a source image from a first frame of a video clip; (b) selecting a destination image, that the source image will transform into, from a second frame of the video clip;
Gauthier does not explicitly specify the underlined terminologies of the following claim features: (c) accepting input from a user for adjusting a **coarseness of a lattice structure**, wherein: (i) the **coarseness of the lattice structure** controls an accuracy for performing a transformation from the source image to the destination image; and (ii) **the coarseness of the lattice structure** determines how sample points on the source image and the destination image are manipulated with respect to each other during the transformation; and (d) performing the transformation of the source image to the destination image in accordance with the **coarseness of the lattice structure**.

Examiner's interpretations: the **coarseness of the lattice structure** interpreted as correcting the position of nodes, which collectively define a structural model. Now according to the examiner's interpretation Gauthier in fig. 6 shows a biomechanical model that structured with number of lattices e.g., 605, 607, and in fig. 10 step 1006 as a prior art adjust the position of the lattice structure, and in fig. 15 in step 1506 drives the **coarseness of the lattice structure**.

Obviously, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute applicant's "coarseness of the lattice structure", with "correcting the position of nodes" that described in the prior art reference, in order to generate animation data for animating a character, wherein the blending of a first motion clip into a second motion clip is inexpensively performed in real-time in reply to animator input, whilst maintaining a high degree of positional accuracy to avoid generating artifacts in the character's motions.

Examiner's note: Technical terminology evolves due to the need for experts in a field to communicate with precision and brevity, but often has the (usually) undesired effect of excluding those who are unfamiliar with the particular specialized language of the group. This can cause difficulties to communicate. Examiner believes there is no need modifying the prior arts to meet the claimed invention, just using different technical terminology.
Claim 12.
Claim 12 is rejected with similar reason as set forth in claim 11, above.

Claim 27.
Claim 27 is rejected with similar reason as set forth in claim 11, above.

Claim 28.
Claim 28 is rejected with similar reason as set forth in claim 11, above.
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Javid A Amini
Examiner
Art Unit 2628

J.A.

KEE M. TUNG
SUPERVISORY PATENT EXAMINER