<table>
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<tr>
<th>APPLICATION NO.</th>
<th>FILING DATE</th>
<th>FIRST NAMED INVENTOR</th>
<th>ATTORNEY DOCKET NO.</th>
<th>CONFIRMATION NO.</th>
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<tbody>
<tr>
<td>09/847,143</td>
<td>05/02/2001</td>
<td>Kun-Pei Chen</td>
<td>GIC-621</td>
<td>6589</td>
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Please find below and/or attached an Office communication concerning this application or proceeding.
**Office Action Summary**

<table>
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<tr>
<th>Application No.</th>
<th>Applicant(s)</th>
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<tbody>
<tr>
<td>09/847,143</td>
<td>CHEN ET AL.</td>
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**Status**

1) □ Responsive to communication(s) filed on _______.
   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) 1-27 is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) □ Claim(s) 1-9, 12-16, 18-23, 26 and 27 is/are allowed.

6) □ Claim(s) _____ is/are rejected.

7) □ Claim(s) 10, 11, 17, 24 and 25 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 02 May 2001 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-948)

3) □ Information Disclosure Statement(s) (PTO-1446 or PTO/SB/08)

4) □ Interview Summary (PTO-413)

   Paper No(s)/Mail Date: ________

5) □ Notice of Informal Patent Application (PTO-152)

6) □ Other: ________
DETAILED ACTION

Specification

1. The sentence "This application is a continuation-in-part of co-pending, commonly assigned U.S. Patent Application No. 09/196,709 filed on November 20, 1998. This application claims the benefit of U.S. provisional patent application no. 60/238,495 filed on October 6, 2000" in the first line of the specification should be changed to -- This application is a continuation-in-part of co-pending, commonly assigned U.S. Patent Application No. 09/196,709 filed on November 20, 1998, now U.S. Patent No. 6,434,195 B1. This application claims the benefit of U.S. provisional patent application no. 60/238,495 filed on October 6, 2000--.

Claim Objections

2. Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

   Claim 17 recites "said storage device". However, "storage device" has been recited in the claim 14. Thus, "said storage device" of claim 17 fails to further limit the "storage device" of the previous claim 14.

3. Claims 10-11 and 24-25 are objected to because of the following informalities:

   Regarding claim 10,
   
   line 2, "an I-frame based MPEG data stream" should be changed to --the I-frame based MPEG data stream--;
lines 2-3. "a progressive l-slice refreshed MPEG data stream" should be changed to --the progressive l-slice refreshed MPEG data stream--; and

line 4, "an I-frame based MPEG data stream" should be changed to --the I-frame based MPEG data stream--.

Regarding claim 11,

line 2, "an I-frame based MPEG data stream" should be changed to --the I-frame based MPEG data stream--;

lines 2-3. "a progressive l-slice refreshed MPEG data stream" should be changed to --the progressive l-slice refreshed MPEG data stream--; and

line 4, "an I-frame based MPEG data stream" should be changed to --the I-frame based MPEG data stream--.

Regarding claim 24,

line 2, "an I-frame based MPEG data stream" should be changed to --the I-frame based MPEG data stream--;

lines 2-3. "a progressive l-slice refreshed MPEG data stream" should be changed to --the progressive l-slice refreshed MPEG data stream--; and

line 3, "an I-frame based MPEG data stream" should be changed to --the I-frame based MPEG data stream--.

Regarding claim 25,

line 2, "an I-frame based MPEG data stream" should be changed to --the I-frame based MPEG data stream--;
line 3. “a progressive l-slice refreshed MPEG data stream” should be changed to --the progressive l-slice refreshed MPEG data stream--; and

line 4, “an I-frame based MPEG data stream” should be changed to --the I-frame based MPEG data stream--. Appropriate correction is required.

Allowable Subject Matter

4. Claims 1-9, 12-16, 18-23, and 26-27 are allowed.

The present invention is directed to a method/apparatus for transcoding progressive l-slice refreshed MPEG data streams to enable trick play mode features on a television appliance. Each independent claim identifies the uniquely distinct features “receiving at the appliance a progressive l-slice refreshed MPEG data stream having l-slices distributed over multiple P-frames”, “decoding the P-frames to recover the l-slices which make up a complete I-frame”, “assembling the recovered l-slices into a complete I-frame” and “encoding the complete I-frame”. The closest prior art, Shimoda et al (US 5,862,295), Mishima et al (US 6,549,717 B2), and Rijckaert (US 6,418,269 B1) disclose conventional video recorder with trick play operations, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

5. Claims 10-11, 17, and 24-25 would be allowable if rewritten to overcome the objection(s) set forth in this Office action.

6. This application is in condition for allowance except for the above formal matters. Prosecution on the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
A shortened statutory period for reply to this action is set to expire TWO MONTHS from the mailing date of this letter.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

   The cited references relate to conventional video recorder.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (571) 272-7382. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

   The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

   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).

TTQ