US006526219C1

(12) EX PARTE REEXAMINATION CERTIFICATE (8527th)

United States Patent
Posa et al.

(10) Number: US 6,526,219 C1
(45) Certificate Issued: Sep. 13, 2011

(54) **PICTURE-BASED VIDEO INDEXING SYSTEM**

(75) Inventors: **John G. Posa**, Ann Arbor, MI (US); **Barry H. Schwab**, West Bloomfield, MI (US)

(73) Assignee: **Inmotion Imagery Technologies, LLC**, Marshall, TX (US)

Reexamination Request:
No. 90/011,171, Sep. 2, 2010

Reexamination Certificate for:

Patent No.:	**6,526,219**
Issued:	**Feb. 25, 2003**
Appl. No.:	**08/556,746**
Filed:	**Nov. 2, 1995**

Certificate of Correction issued Oct. 28, 2003.

(51) **Int. Cl.**

G11B 27/11	(2006.01)
G11B 27/34	(2006.01)
G11B 27/10	(2006.01)
G06F 17/30	(2006.01)
H04N 7/087	(2006.01)
H04N 7/088	(2006.01)
H04N 5/76	(2006.01)

(52) **U.S. Cl.** **386/240**; 386/328; 386/E5.001; 348/E7.031; 707/E17.028; 707/E17.029

(58) **Field of Classification Search** ..... None
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

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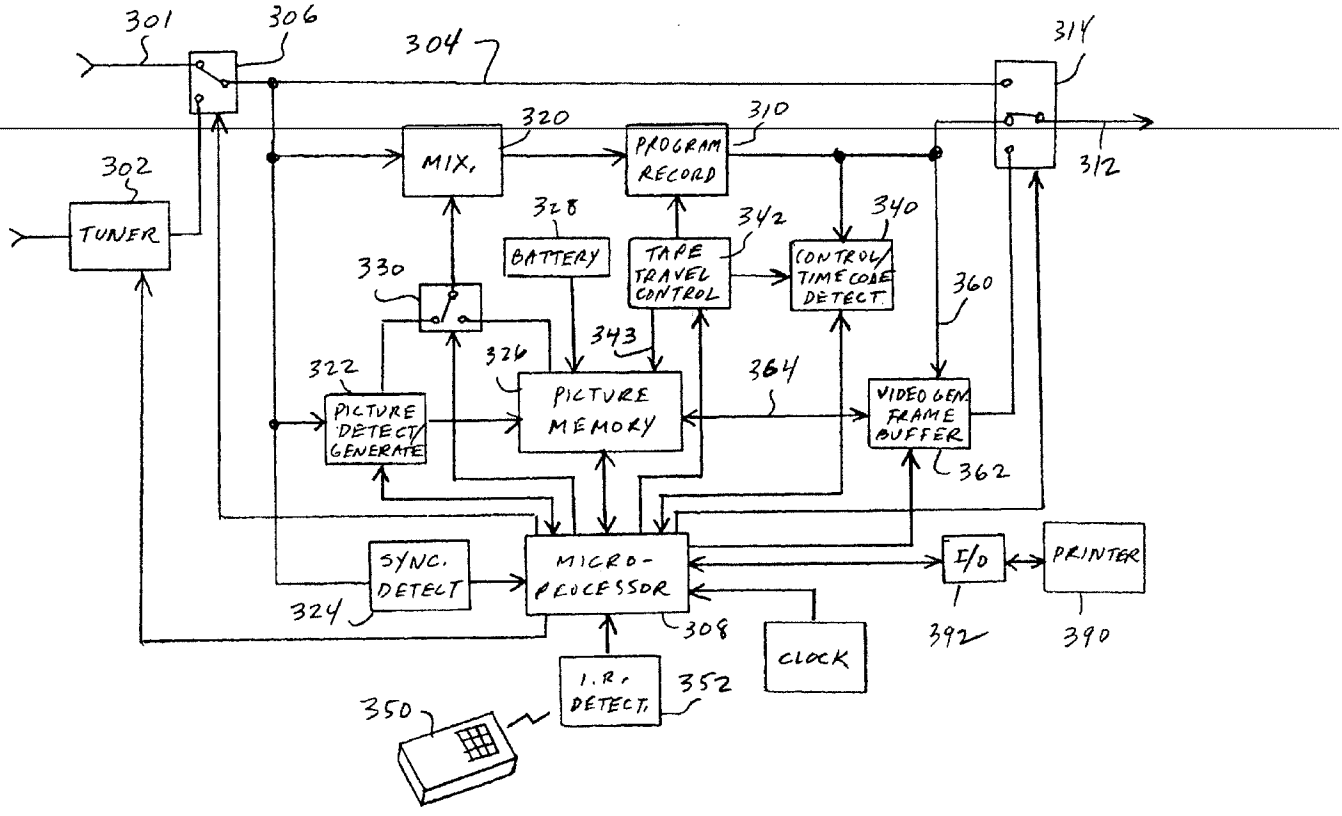
Primary Examiner—Ovidio Escalante

(57) **ABSTRACT**

A video indexing system uses pictures representative of a recorded video program to assist a user in determining the contents of a recorded medium without having to view the program itself. The pictures preferably represent segments of the program which are spaced apart in time, enabling a relatively small number of such pictures to characterize a lengthy program, and are presented in separate windows on the screen of the same device used to display the video program. The pictures may include still or moving imagery. A viewer optionally may select a particular picture with a pointing device, to commence replay of the recorded program from that period in the program, or to recall stored audio information so as to assist in identifying the selection. The picture information may be stored on the same medium as that used to record the video program, or a different medium may be used.



EX PARTE REEXAMINATION CERTIFICATE ISSUED UNDER 35 U.S.C. 307

THE PATENT IS HEREBY AMENDED AS INDICATED BELOW.

Matter enclosed in heavy brackets [ ] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

Claims **10**, **21** and **22** are cancelled.

Claims **1**, **6**, **7**, **9** and **18** are determined to be patentable as amended.

Claims **2-5**, **8**, **11-17**, **19**, **20** and **23** dependent on an amended claim, are determined to be patentable.

1. A video indexing method, comprising the steps of:

recording a video program having a sequence of images;

separately storing information [representative of] *including* a subset of the images, the image subset representing segments of the program which are separated in time; and

displaying images from the [subset] *information* in separate windows on a display device as a way of identifying the contents of the video program, at least one of the windows displaying a segment including motion imagery.

6. A picture-based video indexing system configured for use with a video recorder and display device, the system comprising:

an input for receiving a video program to be recorded by the video recorder;

means for deriving *information including a subset of* pictures representative of time-separated segments of the program;

means for storing the *information separately from the recorded video program* pictures; and

means for displaying [the stored] pictures *from the separately stored information in separate windows* on the display device, [including one or more segments] *at least one of the windows displaying a segment* containing motion imagery *from the pictures in the separately stored information* to provide an index of the recorded video program.

7. The picture-based video indexing system of claim **6**, including means for sampling the video program on a periodic basis to derive the [pictures] *information*.

9. The picture-based video indexing system of claim **6**, wherein the means for storing the [pictures] *information* includes means for storing the *subset of* pictures on the same medium as the recorded video program.

18. A video indexing method, comprising the steps of:

receiving a video program having a sequence of images along with separately encoded image information representing segments of the program which are separated in time; recording the video program;

separately storing the encoded image information; and

displaying images derived from the *separately stored* encoded image information *in separate windows on a display device* as a way of identifying the contents of the video program, [the] *at least one of the windows displaying* images including motion imagery.

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