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# (12) United States Patent

### Jones et al.

### (54) METHOD AND APPARATUS FOR MEDIA DATA TRANSMISSION

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(\*) Notice: Subject to any disclaimer, the term of this

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U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-

claimer.

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### Related U.S. Application Data

- (63) Continuation of application No. 11/497,038, filed on Jul. 31, 2006, now Pat. No. 7,747,765, which is a continuation of application No. 10/789,582, filed on Feb. 26, 2004, now Pat. No. 7,366,788, which is a continuation of application No. 10/177,119, filed on Jun. 21, 2002, now Pat. No. 6,714,984, which is a continuation of application No. 09/139,378, filed on Aug. 25, 1998, now Pat. No. 6,453,355.
- (60) Provisional application No. 60/071,566, filed on Jan. 15, 1998.
- (51) **Int. Cl. G06F 15/16**

(52) **U.S. Cl.** ...... 709/230; 709/231; 370/394

(2006.01)

(10) Patent No.:

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(45) **Date of Patent:** 

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See application file for complete search history.

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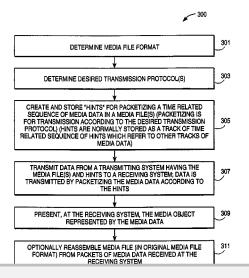
(Continued)

Primary Examiner — Krisna Lim (74) Attorney, Agent, or Firm — Blakely, Sokoloff, Taylor & Zafman, LLP

### (57) ABSTRACT

Methods and apparatuses for processing media data transmitted in a data communication medium. A digital processing system is provided with a time related sequence of media data provided to the digital processing system based on a set of data, wherein the set of data indicates a method to transmit the time related sequence of media data according to a transmission protocol. The set of data, itself, is a time related sequence of data associated with the time related sequence of media data. The time related sequence of media data may be presented and/or stored by the digital processing system.

### 20 Claims, 14 Drawing Sheets





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mo	ovie					
	movie mvhd	heade				
	track					
track header						
moov		tkhd				
		media				
	trak	mdia	media information  video media header data handler data information  vmhd hdlr data information  data reference dref  sample table  sample description time-to-sample sample sizes sample to chunk chunk offset sync sample stable			
media data						
mdat chunk frame frame frame frame frame frame frame						

FIG. 1 Prior Art



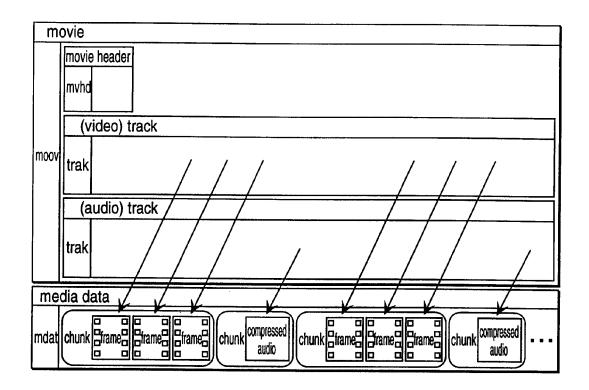


FIG. 2 Prior Art



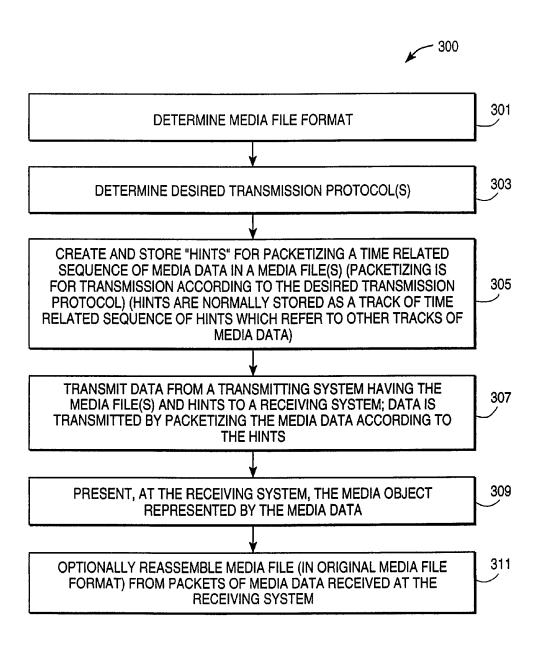


FIG. 3



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