

(12) **United States Patent**
Hoang

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- (54) **PREFETCHED DATA IN A DIGITAL BROADCAST SYSTEM**
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- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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- (22) Filed: **Nov. 10, 2000**

Related U.S. Application Data

- (63) Continuation-in-part of application No. 09/584,832, filed on May 31, 2000.
- (51) **Int. Cl.⁷** **G06F 15/16**
- (52) **U.S. Cl.** **709/226; 709/104; 709/217; 709/233**
- (58) **Field of Search** **709/104, 217, 709/226, 233**

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Assistant Examiner—Stephan Willett

(57) **ABSTRACT**

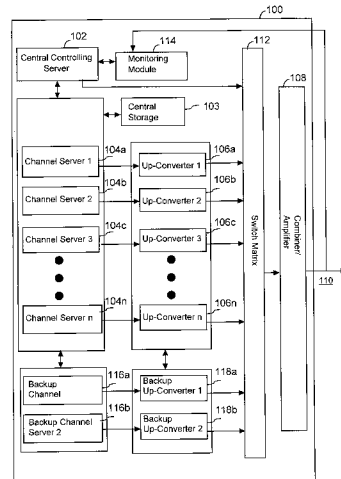
A method for sending data to a client to provide data-on-demand services comprises the steps of: receiving a data file, specifying a time interval, parsing the data file into a plurality of data blocks based on the time interval such that each data block is displayable during a time interval, determining a required number of time slots to send the data file, allocating to each time slot at least a first of the plurality of data blocks and optionally one or more additional data blocks, such that starting from any of the time slots, (i) the data file can be displayed by accessing the first of the plurality of data blocks; (ii) at a consecutive time slot, a next data block sequential to a prior displayed data block is available for displaying; and (iii) repeating step (ii) until all of the plurality of data blocks for the data file has been displayed, and sending the plurality of data blocks based on the allocating step.

14 Claims, 5 Drawing Sheets

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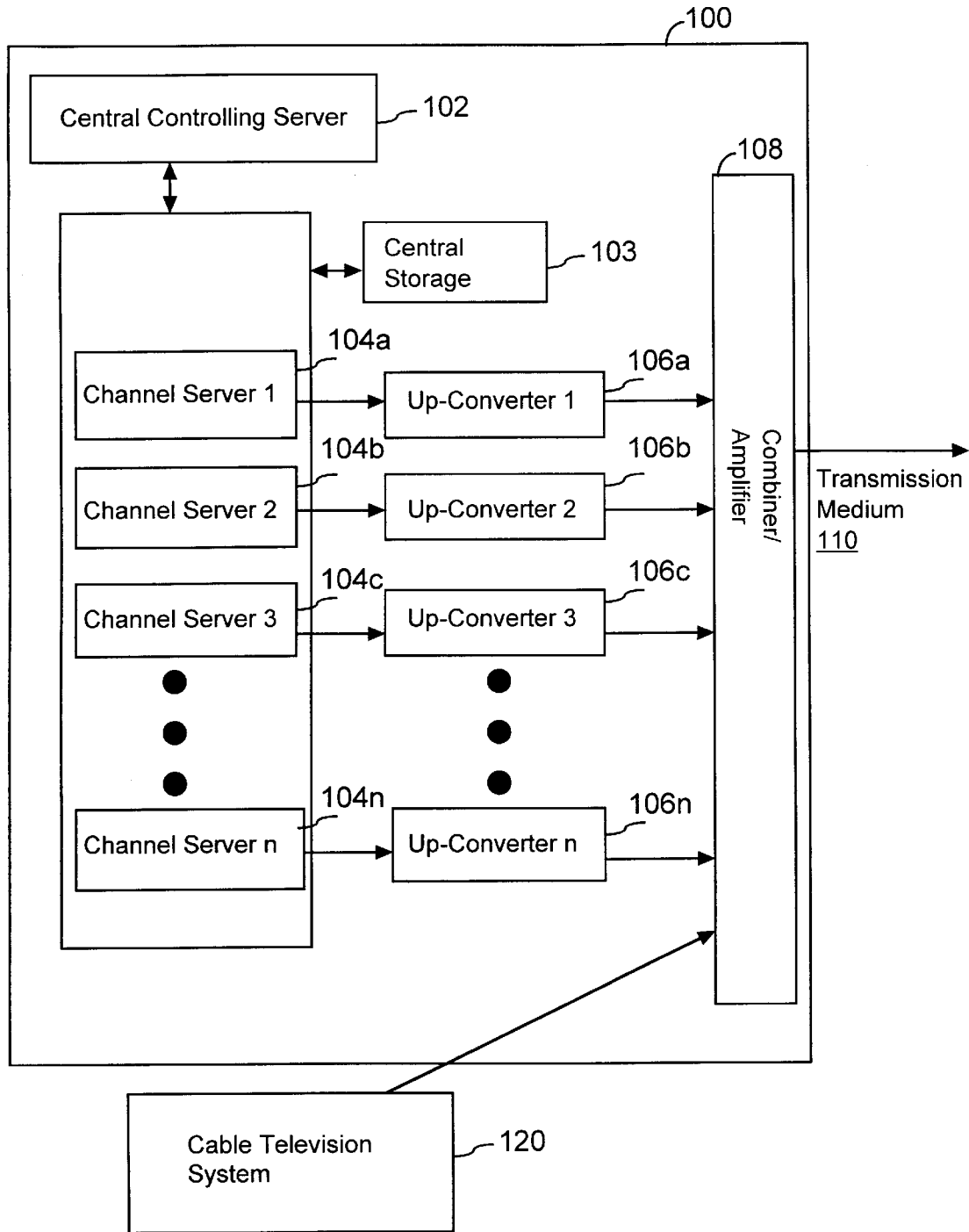


FIG. 1A

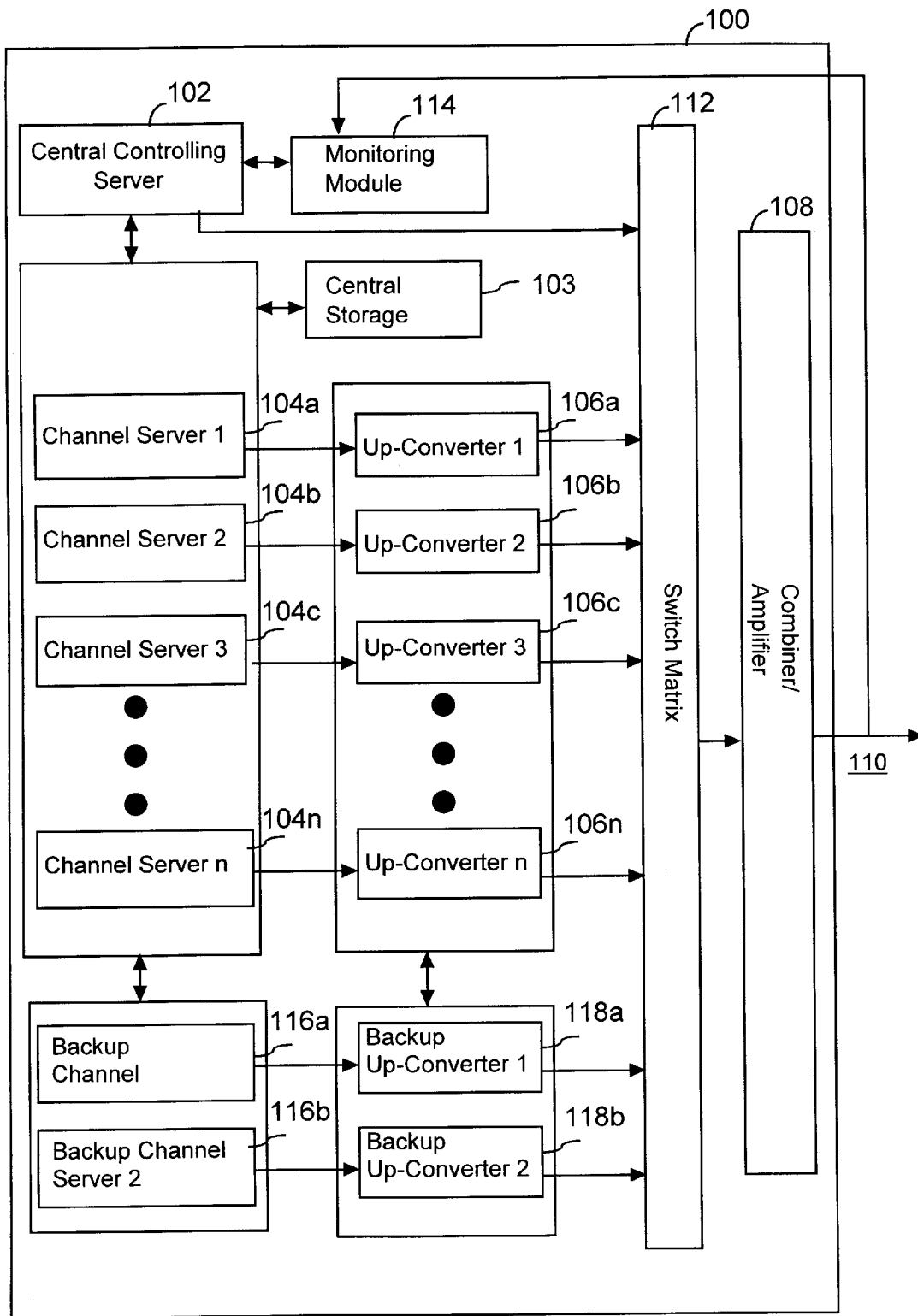


FIG. 1B

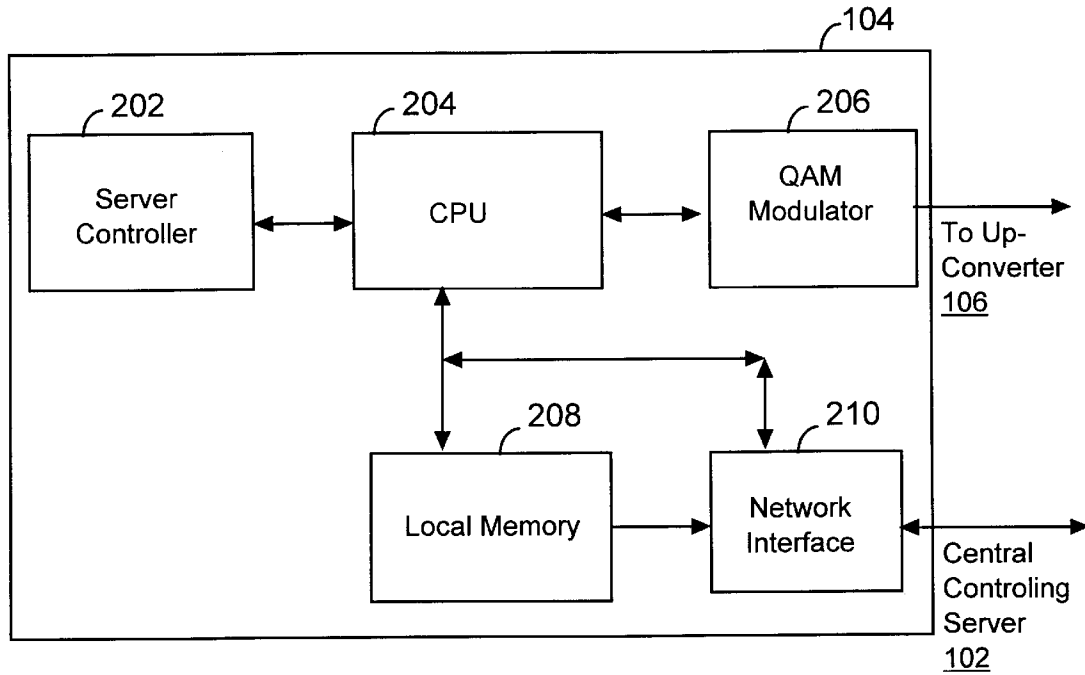


FIG. 2

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