

(12) **United States Patent**
Chen

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(54) **ADAPTIVE MEDIA STREAMING SERVER FOR PLAYING LIVE AND STREAMING MEDIA CONTENT ON DEMAND THROUGH WEB CLIENT'S BROWSER WITH NO ADDITIONAL SOFTWARE OR PLUG-INS**

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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 651 days.

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Related U.S. Application Data

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(52) **U.S. Cl.** **709/219; 709/217; 709/201; 709/224; 709/229; 725/51; 725/110; 725/113; 370/316; 370/338**

(58) **Field of Search** **709/2, 203, 219, 709/201, 217, 218, 224, 229; 370/316, 338, 351, 352; 725/110, 113, 51**

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Primary Examiner—David Wiley

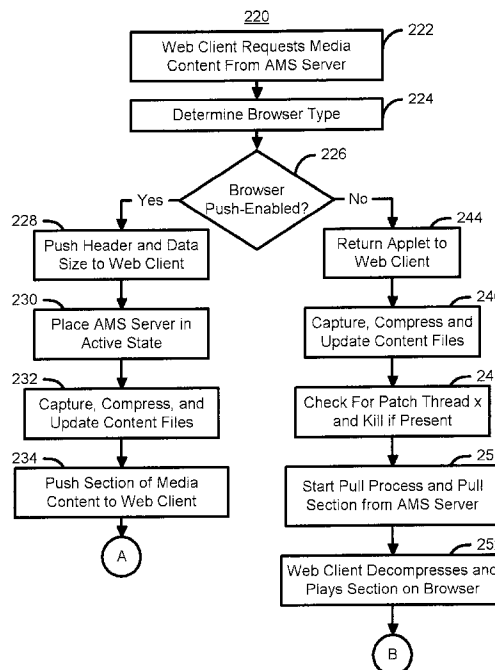
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(57) **ABSTRACT**

A method and system for providing media content in real-time on a web client is disclosed. The web client includes a browser utilizing a cache. The media content can be separated into a plurality of sections. The browser of the web client can read and display a section of the media content without additional software or plug-ins. In one aspect, the method and system include ensuring that the web client can flush the cache to allow the media content to be played in real-time, preferably in response to the web client requesting the media content. In this aspect, the method and system also include providing the plurality of sections of the media content to the web client section by section and allowing the web client to flush the section of the media content from the cache once each of the plurality of section has been displayed. In a second aspect, the method and system include requesting the media content using the web client and ensuring that the web client can flush the cache to allow the media content to be played in real-time. In this aspect, the method and system also include receiving each of the plurality of sections of the media content on the web client section by section, displaying each of the plurality of sections section by section and flushing each section of the media content from the cache once each of the plurality of sections has been displayed.

40 Claims, 7 Drawing Sheets



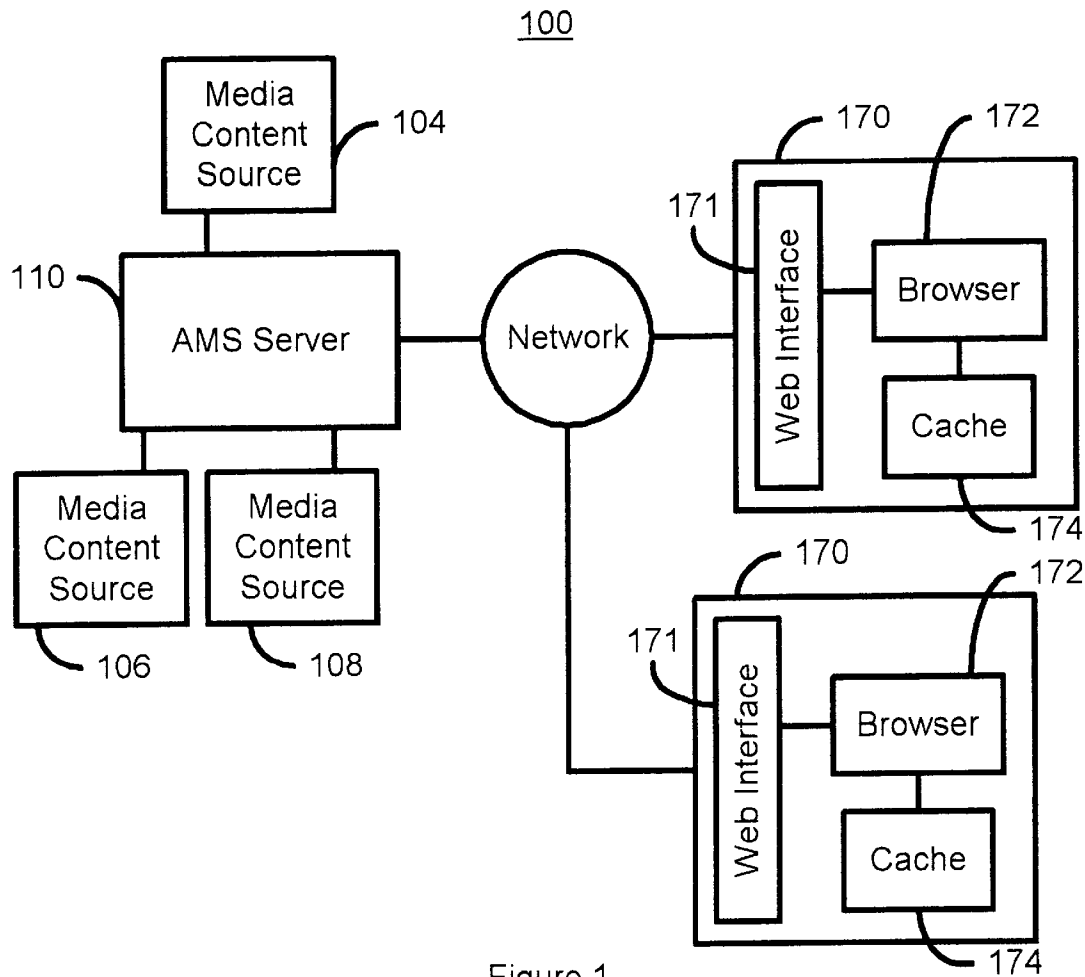


Figure 1

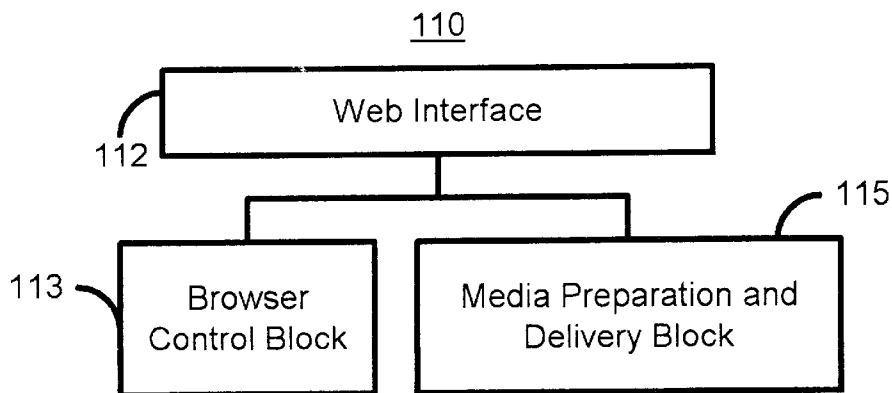


Figure 2A

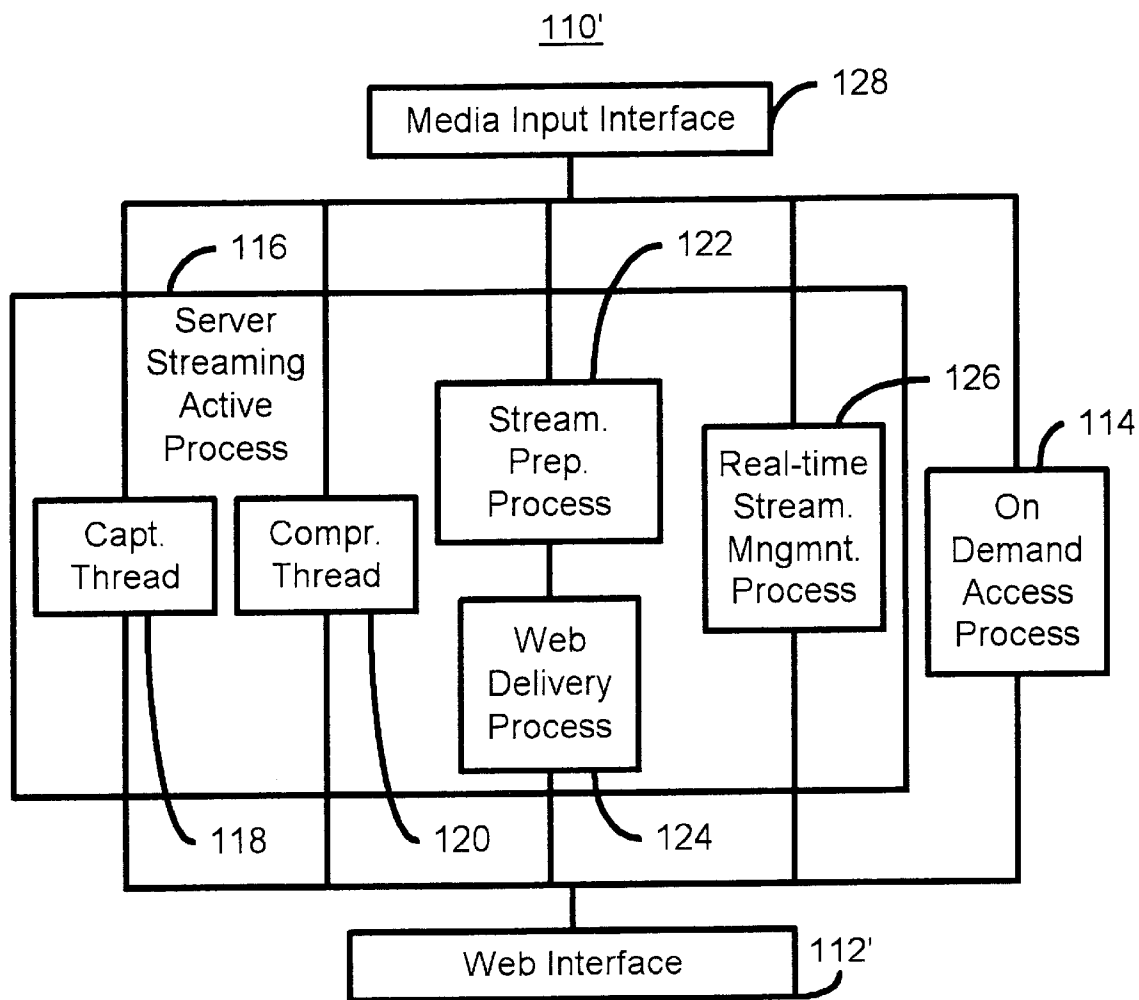


Figure 2B

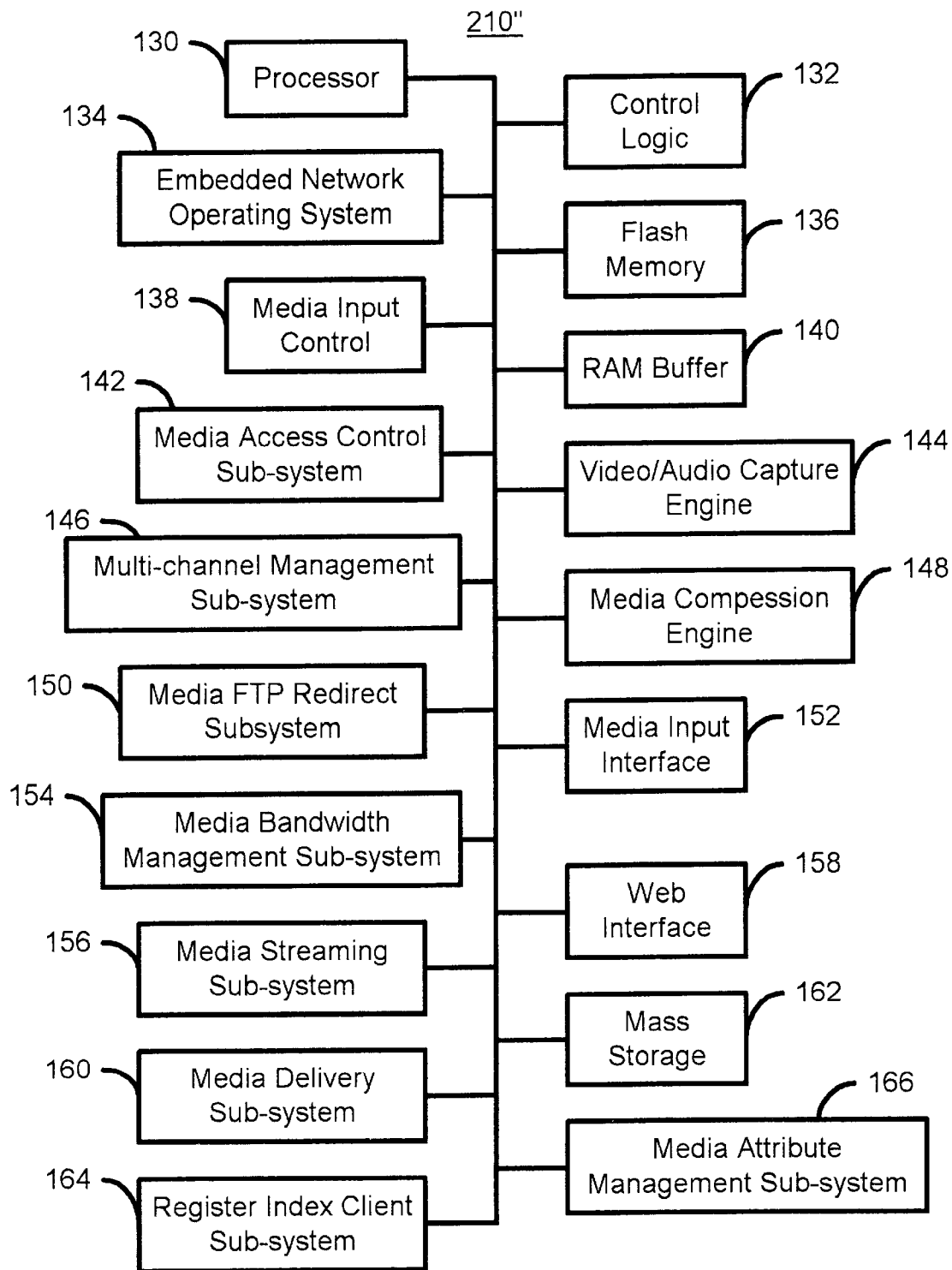


Figure 2C

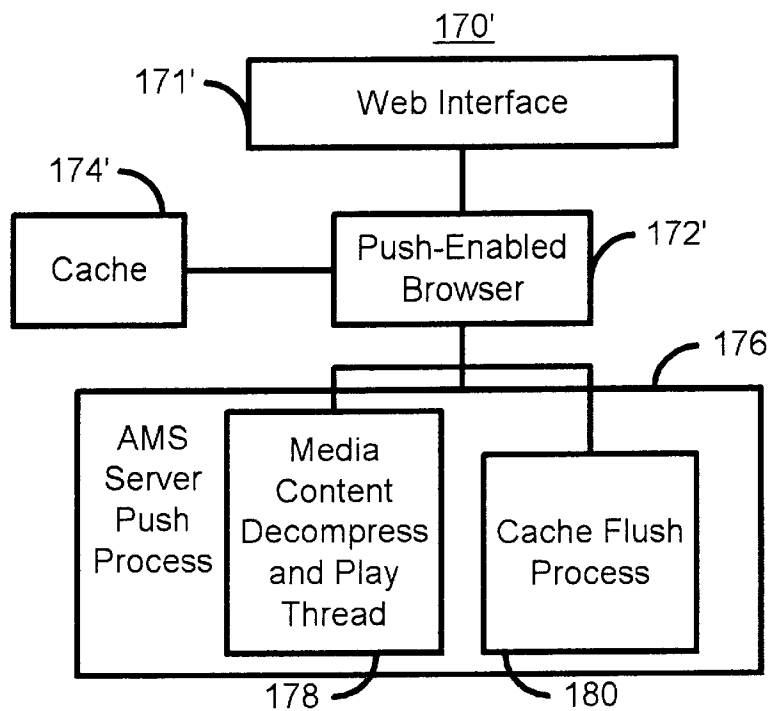


Figure 3A

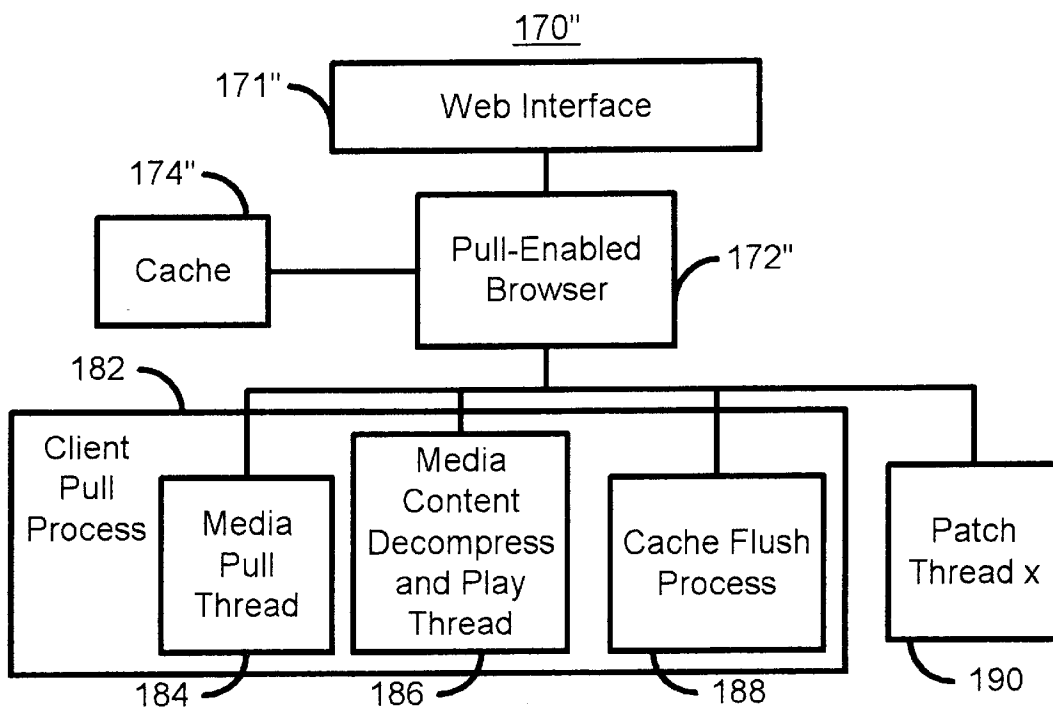


Figure 3B

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