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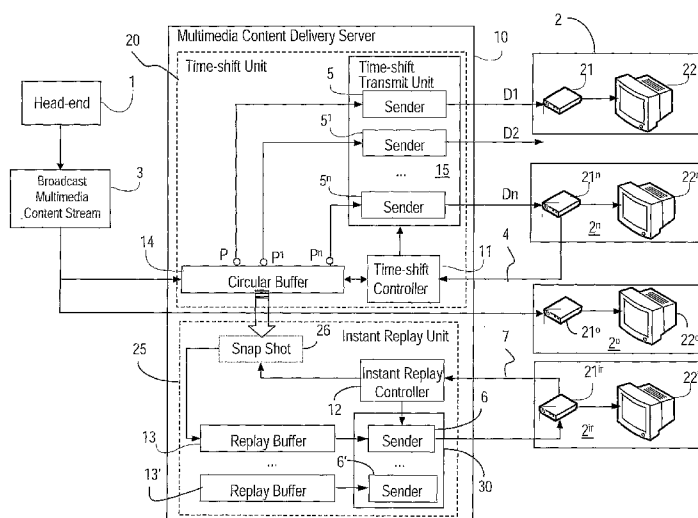
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[Continued on next page]

(54) Title: NETWORK BASED INSTANT REPLAY AND TIME SHIFTED PLAYBACK



(57) Abstract: A circular buffer in a video delivery server tracks a second copy of a live video stream to provide instant replay capability. When an end-user initiates the instant replay function, the circular buffer is copied to an instant-replay buffer, from which a replay of the video is sent to the end-user. During replay the end-user can use playback functions such as pause, slow-play, freeze frame, etc. Upon leaving the replay function the end user rejoins the live stream. The circular buffer also enables transmission of delayed copies of the live stream, time-shifted by predetermined intervals, which copies are multicasted to end-users. Upon request, an end-user may join a delayed version of interest. This allows the user to replay interesting content by jumping to a time-delayed version without missing the show and to catch up with real-time during e.g. commercial breaks.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

INV. H04L29/06 H04N7/173 H04N5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2004/073306 A (VIDEO NETWORKS LTD [GB]) 26 August 2004 (2004-08-26) page 6, line 2 - line 6; figures 1,2 page 7, line 17 - line 29 page 9, line 33 - page 10, line 3 page 10, line 4 - line 13 page 16, line 28 - page 17, line 6 page 19, line 4 - line 7 page 19, line 17 - line 20 page 22, line 26 - line 29 page 24, line 23 - line 25	1-20
A	US 2001/047516 A1 (SWAIN MICHAEL J [US] ET AL) 29 November 2001 (2001-11-29) the whole document ----- -/--	1-20

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005/146990 A1 (MAYER YARON [IL]) 7 July 2005 (2005-07-07) abstract paragraphs [0009], [0010], [0012], [0013], [0018]; figure 3 -----	1-20
A	EP 1 185 095 A (BURST COM INC [US]) 6 March 2002 (2002-03-06) the whole document -----	1-20

INTERNATIONAL SEARCH REPORT

information on patent family members

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