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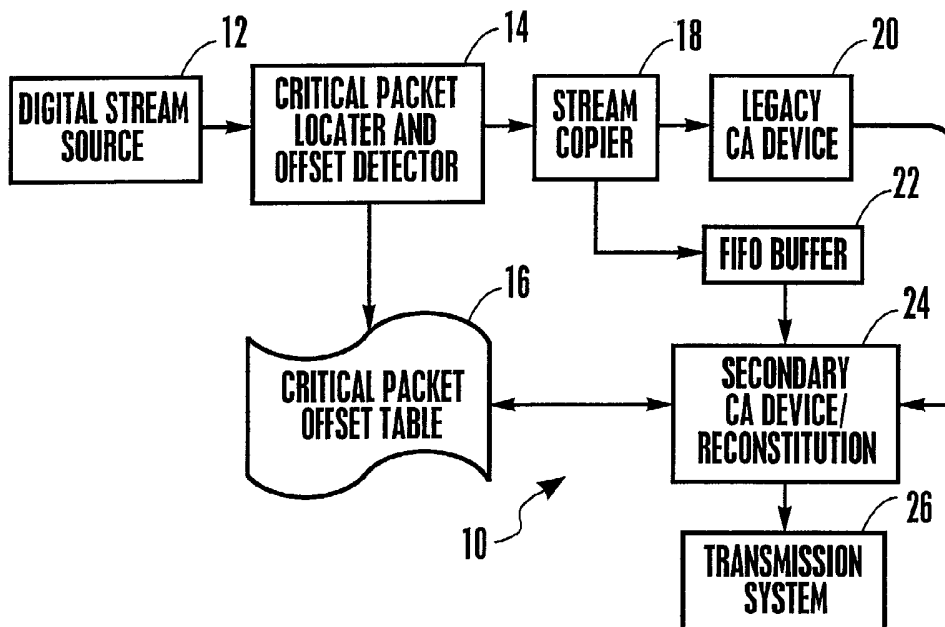
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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR PARTIALLY ENCRYPTED MULTIMEDIA STREAM



(57) Abstract: A multimedia stream head end includes a legacy conditional access (CA) device (20) that fully encrypts the stream using legacy keys. A copy of the stream is sent to a secondary CA device (24) that encrypts only critical packets in the stream using secondary keys to render a partially encrypted stream. The critical packets in the fully encrypted stream from the legacy CA device (20) are obtained and inserted next to the corresponding critical packets in the partially encrypted stream. Thus, only critical packets are encrypted, with encrypted versions being generated by both the legacy CA (20) and secondary CA (24) without the legacy CA (20) knowing which of the packets that it encrypts are "critical".

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/06987

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04N 7/167
 US CL : 380/217

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)
 U.S. : 380/217, 203, 212, 232, 237, 239; 713/160, 200; 705/52, 57

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 practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, P	US 6,681,326 B2 (SON et al) 20 January 2004 (20.01.2004), column 2 line 42 to column 6 line 28.	1-17
A	US 5,805,700 (NARDONE et al) 08 September 1998 (08.09.1998), whole document.	1-17
A	US 6,549,229 B1 (KIRBY et al) 15 April 2003 (15.04.2003), whole document.	1-17
A, T	US 6,904,520 B1 (ROSSET et al) 7 June 2005 (07.06.2005), whole document.	1-17
A	Shi et al. An Efficient MPEG Video Encryption Algorithm IEEE. 1998 pages 384-386	1-17
A, P	Liu et al. Motion Vector Encryption in Multimedia Streaming IEEE. 2004 pages 64-71	1-17

Further documents are listed in the continuation of Box C.

See patent family annex.

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"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/06987

Continuation of B. FIELDS SEARCHED Item 3:

EAST, Google, IEEE, Proquest

search terms: multimedia stream, multimedia, audio, video, on-demand, pay per view, access rights, access conditions, copy, copying, copies, copied, predetermined encryption, partial encryption, set top box, identifier, packets, cable