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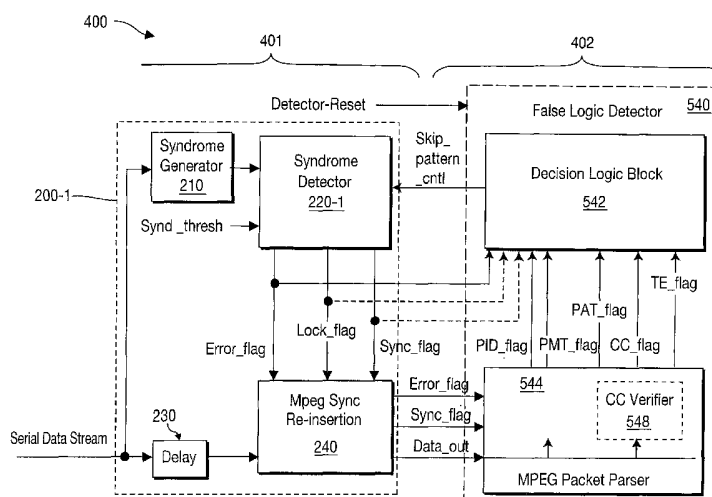
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR FALSE SYNC LOCK DETECTION IN A DIGITAL MEDIA RECEIVER



(57) Abstract: A method and apparatus (400) for identifying a false MPEG-2 packet synchronization lock condition by parsing MPEG-2 packets that may have been incorrectly delineated by a sync-byte checksum-decoder, to detect resulting anomalies. Forcing the restart of the conventional checksum-encoded sync-byte synchronization/lock process upon generating a "resync" command based upon the anomalies detected by a False Lock Detector. Reliably synchronizing and delivering the MPEG-2 stream to the receiver transport layer. The False-Lock Detector circuit compares the content of the currently identified packet header or payload portion of a sync-byte delineated packet with expected values in order to detect a false-lock condition and to eliminate false sync-byte position-candidates from the basis of a "synchronization lock".



(88) Date of publication of the international search report:

24 March 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04L7/04 H04N7/24 H04N5/00 H04N7/66 H04N7/62

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)

IPC 7 H04L H04N

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, COMPENDEX, INSPEC, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 5 956 102 A (LANE FRANK A) 21 September 1999 (1999-09-21) abstract column 1, line 1 - column 4, line 6; figures 1,2 column 7, line 36 - column 8, line 39; figure 6 column 10, line 30 - column 13, line 2 ----- -/--	1,2,10, 12,13, 24-29, 31,35-38 3-9,11, 14-23, 30,32-34

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

☒ Patent family members are listed in annex.

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- * & * document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Inter al Application No
PCT/US2004/019357

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JUAN Y: "ERRONEOUS MPEG PACKET SYNCHRONIZATION IN THE MCNS/SCTE/ITU-T J.83 ANNEX B STANDARD" IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, IEEE INC. NEW YORK, US, vol. 44, no. 3, August 1998 (1998-08), pages 963-968, XP000851606 ISSN: 0098-3063 abstract page 964, left-hand column, paragraph 1 page 966, left-hand column, paragraph 1 - right-hand column, paragraph 3 page 967, left-hand column, line 20 - page 968, left-hand column, paragraph 4 -----	1-38
A	"Digital Video Broadcasting (DVB); Measurement guidelines for DVB systems; ETSI TR 101 290" ETSI STANDARDS, EUROPEAN TELECOMMUNICATIONS STANDARDS INSTITUTE, SOPHIA-ANTIPO, FR, vol. BC, no. V121, May 2001 (2001-05), XP014004824 ISSN: 0000-0001 page 16, line 1 - page 24, last line -----	1-38
A	"Digital multi-programme systems for television, sound and data services for cable distribution" ITU-T RECOMMENDATION J.83, April 1997 (1997-04), pages 1-66, XP002246522 cited in the application page 14, paragraph 1 - page 20, paragraph 1 -----	1-38
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A,P	abstract ----- paragraph '0044! - paragraph '0054! ----- -/--	5-7,9, 10,16, 17,20, 22,23, 25,33, 35,36

INTERNATIONAL SEARCH REPORT

International Application No
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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.
X,P A,P	EP 1 389 849 A (BROADCOM CORP) 18 February 2004 (2004-02-18) abstract column 6, line 18 - column 8, line 14; figures 1,2,7 -----	12,24 1-11, 13-23, 25-38

INTERNATIONAL SEARCH REPORT

Information on patent family members

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