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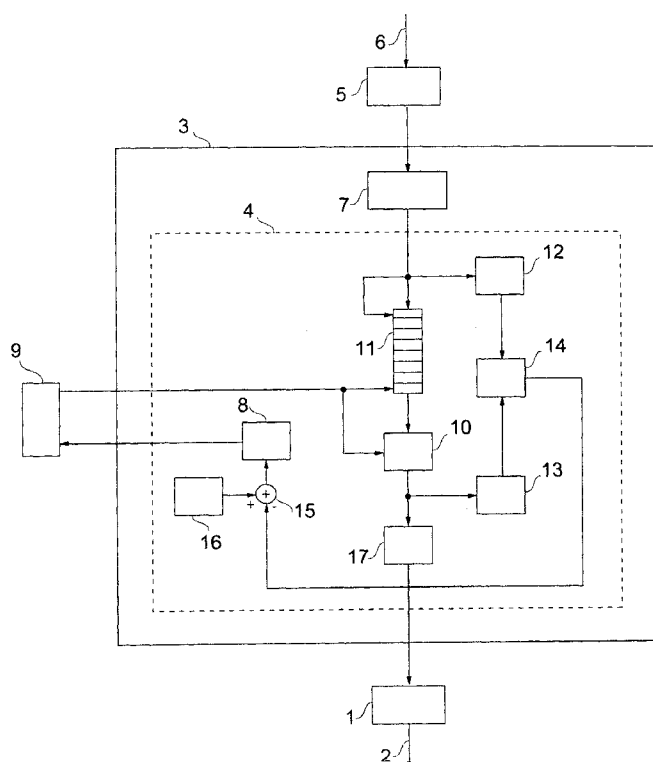
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[Continued on next page]

(54) Title: A DEVICE FOR RECEIVING OF HIGH-DEFINITION VIDEO SIGNAL WITH LOW-LATENCY TRANSMISSION
OVER AN ASYNCHRONOUS PACKET NETWORK



(57) Abstract: A device based on the proposed solution allows high-definition video transmissions with low latency over an asynchronous packet computer network such as Ethernet. The transmitter and receiver comprise a video input or output module (1), an FPGA board (3), and an optical transceiver (5) for transmission and reception of a signal over the Ethernet network. The principle of the new device is that the receiver comprises one or more tunable oscillators (9) connected to the FPGA board (3) comprising a module (7) for packet reception, and one or more sets (4) of modules for video data processing. These sets (4) of modules adjust the data rate onto video outputs (2) to the data generation rate on the transmitter's side and enable to display the beginning of a frame at the correct position, even though the transmitter and receiver are interconnected by an asynchronous packet network such as Ethernet, which cannot be used for receiver clock recovery in line with a transmission data rate, and this is all possible without the need for a large frame memory increasing the delay.



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

B. FIELDS SEARCHED

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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)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>SHIRAI D ET AL: "Real time switching and streaming transmission of uncompressed 4K motion pictures", FUTURE GENERATIONS COMPUTER SYSTEMS, ELSEVIER SCIENCE PUBLISHERS. AMSTERDAM, NL, vol. 25, no. 2, 1 February 2009 (2009-02-01), pages 192-197, XP025468595, ISSN: 0167-739X, DOI: 10.1016/J.FUTURE.2008.07.003 [retrieved on 2008-07-25] abstract paragraphs [0001] - [0003], [0006] figures 1,2</p> <p>----- -/-</p>	1-3



Further documents are listed in the continuation of Box C.



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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	<p>intoPIX: "PRISTINE JPEG2000 Boards", 28 November 2009 (2009-11-28), pages 1-6, XP002658911, Retrieved from the Internet: URL:http://web.archive.org/web/20091128002 838/http://www.intopix.com/uploaded/Downlo ad%20Products/intoPIX%20PRISTINE%20JPEG%20 2000%20BOARDS_Nov09.pdf?PHPSESSID=d2183b6a c0017e2cf6bcd3391dabe4d the whole document</p>	1-3
A	<p>SUN YONG KIM ET AL: "Requirements for developing ultra-realistic live streaming systems", INTERNATIONAL SYMPOSIUM ON INTELLIGENT SIGNAL PROCESSING AND COMMUNICATION SYSTEMS, 2009. ISPACS 2009., 7 December 2009 (2009-12-07), pages 175-178, XP031612867, IEEE, PISCATAWAY, NJ, USA ISBN: 978-1-4244-5015-2 abstract paragraphs [II.B], [II.C] figures 2,6</p>	1-3
A	<p>SHIMIZU T ET AL: "International real-time streaming of 4K digital cinema", FUTURE GENERATIONS COMPUTER SYSTEMS, vol. 22, no. 8, 1 October 2006 (2006-10-01), pages 929-939, XP025052112, ELSEVIER SCIENCE PUBLISHERS. AMSTERDAM, NL ISSN: 0167-739X, DOI: 10.1016/J.FUTURE.2006.04.001 [retrieved on 2006-10-01] abstract paragraphs [0001], [02.2], [02.3], [0003], [03.1], [03.3], [0006] figure 2</p>	1-3
A	<p>DAISUKE SHIRAI ET AL: "4K SHD Real-Time Video Streaming System With JPEG 2000 Parallel Codec", IEEE ASIA PACIFIC CONFERENCE ON CIRCUITS AND SYSTEMS, 2006. APCCAS 2006, 1 December 2006 (2006-12-01), pages 1855-1858, XP031071218, IEEE, PISCATAWAY, NJ, USA ISBN: 978-1-4244-0387-5 abstract paragraphs [0001], [II.A], [II.B] figures 1,3</p>	1-3
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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.
A	<p>Anonymous: "NTT Electronics and NTT Exhibit New Products and Technologies this April at the NAB2007 in Las Vegas", NTT Electronics: News and Events</p> <p>11 April 2007 (2007-04-11), pages 1-2, XP002658976, Retrieved from the Internet: URL:http://www.ntt-electronics.com/en/products/video/news_and_events/news/070411.htm 1 [retrieved on 2011-09-13] page 1, paragraph 1 -----</p>	1-3