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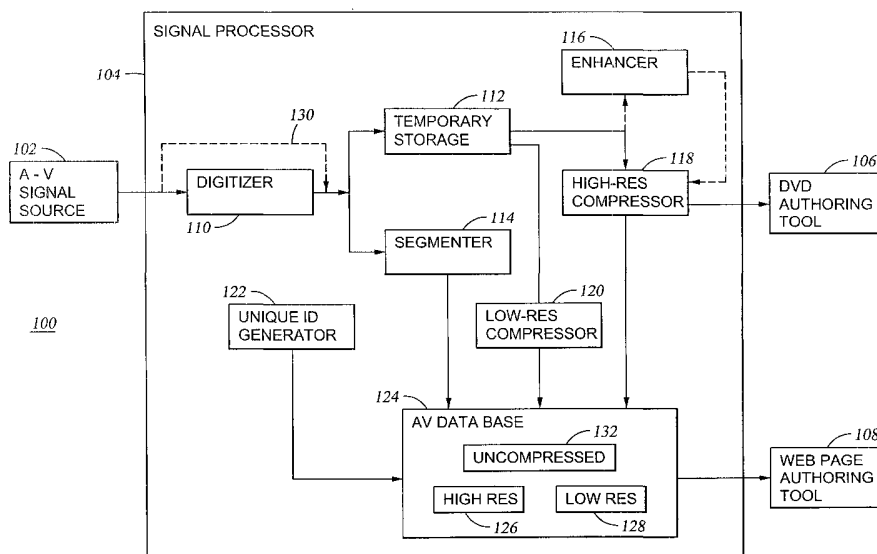
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60/158,469 8 October 1999 (08.10.1999) US
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- (72) Inventors: **KUMAR, Rakesh**; 966 Ridge Road, Monmouth Junction, NJ 08852 (US). **SAWHNEY, Harpreet, S.**; 17 Melville, Cranbury, NJ 08512 (US). **HANNA, Keith**; 212 John Street, Princeton, NJ 08540 (US).
- (54) Title: METHOD AND APPARATUS FOR ENHANCING AND INDEXING VIDEO AND AUDIO SIGNALS
- (57) Abstract: A method and apparatus (100) for indexing digital video and audio signals using a digital database. A user may index the digital images by content within the images, through annotation, and the like. The database (124) can contain high resolution and low resolution versions of the audio-video content. The indexed video can be used to create web pages that enable a viewer to access the video clips. The indexed video may also be used to author digital video disks (DVDs). The video may be enhanced to achieve DVD quality or be accessed to enhancing the digital signals and indexing the digital signals. The user may choose to enhance the digital signals by combining frames into a panorama, enhancing the resolution of the frames, filtering the images, and the like.
- (74) Agent: **PATTERSON, W., Bruce**; Thomason, Moser & Patterson, LLP, Suite 1500, 3040 Post Oak Blvd., Houston, TX 77056 (US).
- (81) Designated State (*national*): JP.
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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/27924

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F17/30

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 G06F

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, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	UEDA H ET AL: "AUTOMATIC STRUCTURE VISUALIZATION FOR VIDEO EDITING" BRIDGES BETWEEN WORLDS. AMSTERDAM, APR. 24 - 29, 1993, PROCEEDINGS OF THE CONFERENCE ON HUMAN FACTORS IN COMPUTING SYSTEMS. (INTERCHI), READING, ADDISON WESLEY, US, 24 April 1993 (1993-04-24), pages 137-141, XP000195707 the whole document ----- -/--	1-15

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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A document defining the general state of the art which is not considered to be of particular relevance

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O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Date of the actual completion of the international search

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25/09/2003

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/27924

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	<p>WO 98 21688 A (SARNOFF CORP) 22 May 1998 (1998-05-22) page 11, line 3 -page 17, line 14 page 22, line 5 - line 25; figure 1</p> <p style="text-align: center;">---</p>	1-14
A	<p>DICKSON S ET AL: "THE GEMINI PROCESS: A THEATRICAL-QUALITY VIDEO-TO-FILM TRANSFER PROCESS" BETTER VIDEO IMAGES. INCL. 23RD ANNUAL SMPTE TELEVISION CONFERENCE, SAN FRANCISCO, CA, FEB. 3 - 4, 1989, pages 30-35, XP000088826 the whole document</p> <p style="text-align: center;">---</p>	9,10
A	<p>WO 98 50885 A (SARNOFF CORP) 12 November 1998 (1998-11-12) cited in the application the whole document</p> <p style="text-align: center;">-----</p>	9,10

INTERNATIONAL SEARCH REPORT

International Application No

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