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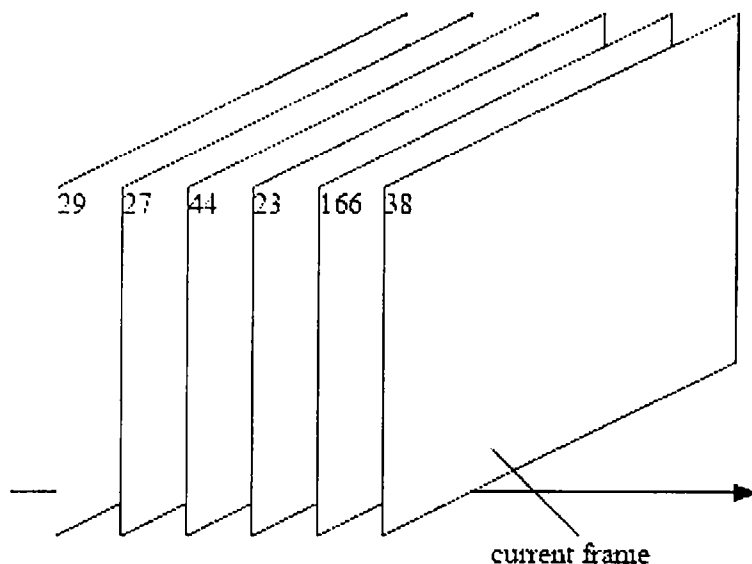
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(54) Title: METHOD AND SYSTEM FOR FINGERPRINTING DIGITAL VIDEO OBJECT BASED ON MULTIREOLUTION, MULTIRATE SPATIAL AND TEMPORAL SIGNATURES



(57) Abstract: A method and system for generating a fingerprint for a video object. The method includes obtaining a plurality of frames associated with a video object. Additionally, the method includes, for each of the plurality of frames, processing information associated with the plurality of frames, determining a plurality of spatial signatures for the each of the plurality of frames based on at least information associated with the plurality of frames, and determining a plurality of temporal signatures for the each of the plurality of frames based on at least information associated with the plurality of frames. The plurality of spatial signatures corresponds to a plurality of resolutions respectively, and the plurality of temporal signatures corresponding to a plurality of frame rates respectively.

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INTERNATIONAL SEARCH REPORT

International application No. PCT/US 07/66088
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<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - H04L 9/00 (2007.10) USPC - 705/58 According to International Patent Classification (IPC) or to both national classification and IPC</p>
<p>B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) USPC: 705/58</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 705/57; 726/26; 726/32; 382/100 (view text search terms below)</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) pubWEST(PGPB,USPT,EPAB,JPAB); DialogPRO(Engineering); Google Scholar; Text search terms: fingerprint digital video object, generate fingerprint video object, frame associate video object, process information associated frames, determine spatial signature frame, determine temporal signature</p>

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y Y	US 2003/0185417 A1 (ALATTAR, et al.) 02 October 2003 (02.10.2003) entire document, especially Abstract, FIGS.1 and 7 and para [0014], [0026], [0029]-[0031], [0029]-[0030], [0045], [0049], [0054], [0056], [0060], [0064], [0075], [0092], [0094], [0097]-[0098], [0104], [0109]-[0111], [0120], [0127], [0136], [0140], [0142]-[0143], [0146]-[0147], [0152], [0156] and [0160]	1-8, 10-21, 24-31 ----- 9, 22-23 9, 23
Y	US 4,792,226 A (FISHBINE, et al.) 20 December 1988 (20.12.1988) entire document, especially Abstract, FIG.2 and (col 15, ln 48-51), (col 16, ln 15-18) and (col 31, ln 1-9)	22
A	US 2005/0175224 A1 (VENKATESAN, et al.) 11 August 2005 (11.08.2005) entire document, especially Abstract and para [0127]	1-31
A	MOHANTY, Saraju P. 'Digital Watermarking: A Tutorial Review'. From the Department of Computer Science [online], University of South Florida, Tampa, Fla. 33620. Prepared in 1999 at the Indian Institute of Technology, Bangalore, India. [retrieved on 2007-11-21]. Retrieved from the internet: <URL: http://www.cs.unf.edu/~smohanty/research/Reports/MohantyWatermarkingSurvey1999.pdf >	1-31
	SU, Karen et al. 'Statistical invisibility for collusion-resistant digital video watermarking'. In Multimedia [online], IEEE Transactions on; Publication Date: February 2005, Volume: 7, Issue: 1, p. 43-51. Posted online: 2005-01-24 09:09:48.0. [retrieved on 2007-11-21]. Retrieved from the internet: <URL: http://wcl3.tamu.edu/publ/papers/SuKunHat04.pdf >	

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:	"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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"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	

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