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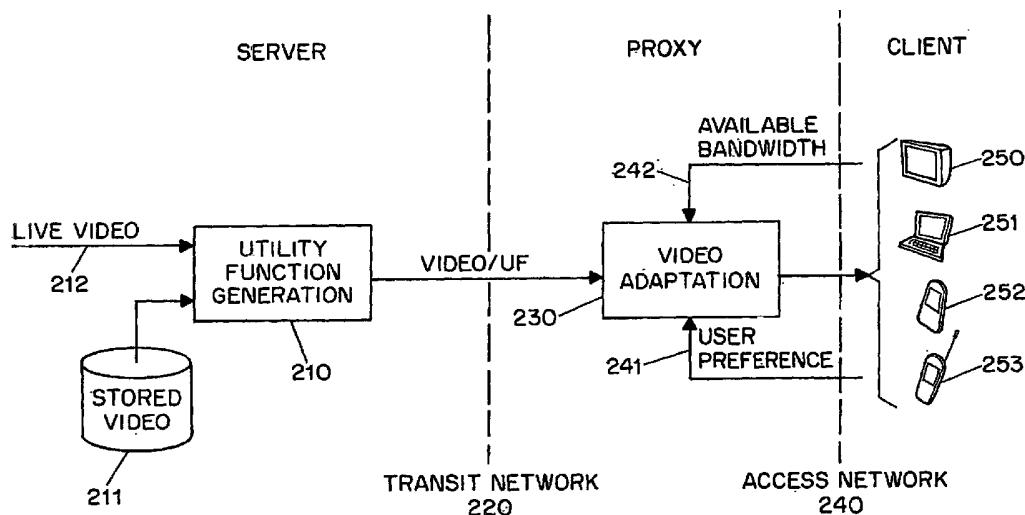
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(54) Title: METHOD AND SYSTEM FOR OPTIMAL VIDEO TRANSCODING BASED ON UTILITY FUNCTION DESCRIPTORS



(57) Abstract: Techniques for generating utility-based descriptors (210) from compressed multimedia information are provided. A preferred method includes the steps of receiving (230) at least a segment of compressed multimedia information, determining two or more portions of utility based descriptor information based on one or more adaptation operations, each corresponding to a unique target rate, adapting the compressed multimedia segment by each of the portions of utility based descriptor information to generate adapted multimedia segments, using a quality of management method to generate a quality measurement for each adapted multimedia segment, and generating a utility based descriptors based on the portions of utility based descriptor information and corresponding quality measurements.



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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PCT/US03/12858

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04N 7/12

US CL : 375/240.26

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. : 348/180, 192; 375/240.01, 240.12-240.16, 240.18, 240.20, 240.24, 240.26-240.28; 709/247; 725/105, 116-118

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,694,334 A (DONAHUE et al) 02 December 1997, fig. 1, cols. 1-5, col. 7.	23-31, 37-48
Y		1-22, 32-36
Y	US 6,356,309 B1 (MASAKI et al) 12 March 2002, col. 10, lines 45-61, col. 61, line 57 to col. 62, line 5.	11-18, 32-36
Y	US 6,366,314 B1 (GOUDEZEUNE et al) 02 April 2002, col. 4, line 53 to col. 5, line 12.	1-22

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" Inter 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
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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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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