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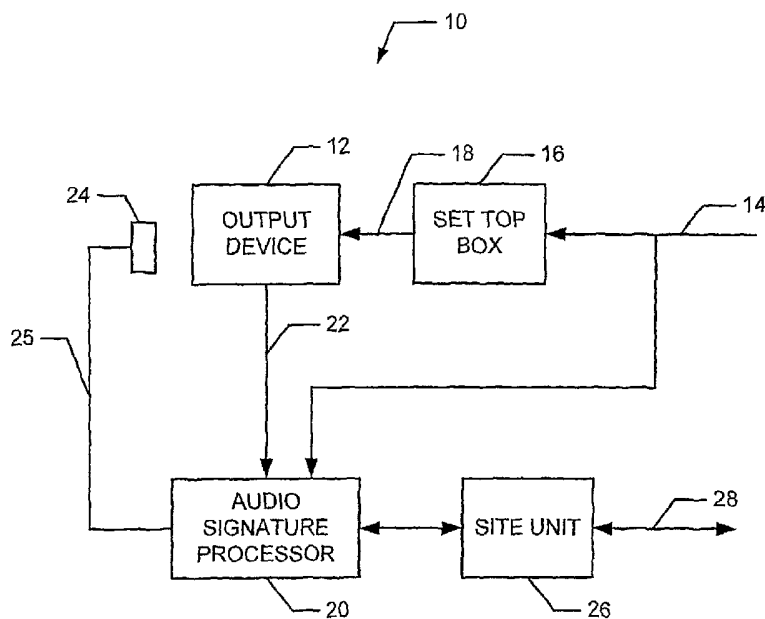
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[Continued on next page]



(57) Abstract: Signature-based channel or program identification apparatus and methods for use with audio/video content delivery and distribution systems are disclosed. The disclosed apparatus and methods acquire peak signal magnitudes between zero crossings of a reference audio signal and an audio signal associated with audio/video content consumed at a consumption site. Signatures for the signals are developed using sums of the peak signal magnitudes and the signatures are compared to identify the audio/video content consumed at the consumption site.



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- with international search report
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## A. CLASSIFICATION OF SUBJECT MATTER

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## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 725/9-21; 455/221, 334, 226.1, 186.1, 184.1; 704/231, 243, 244, 246, 249; 381/56, 58

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)  
IEEE Archives

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,881,360 A (FONG) 09 March 1999 (09.03.1999), whole document	1-72 and 76-79
A	US 5,672,999 A (FERRER et al) 30 September 1997 (30.09.1997), whole document	1-87
A	KIM, D. et al Auditory Processing of Speech Signals for Robust Speech Recognition in Real-World Noisy Environments IEEE Transactions on Speech and Audio Processing, Vol. 7, No. 1, January 1999, Pages 55-69	1-72 and 76-79

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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