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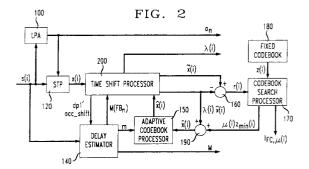
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## [54] Time shifting for analysis-by-synthesis coding.

57) A generalized analysis-by-synthesis technique is disclosed. Illustratively, a section of an original signal containing a local maximum energy is identified. A plurality of segments of the original signal containing the local maximum energy are selected based on a plurality of time shifts. These segments are termed "trial original signals." Each trial original signal is compared to a synthesized signal from an adaptive codebook and a measure of similarity (e.g., a crosscorrelation) between these signals is evaluated. A trial original signal for use in coding is determined based on one or more evaluated measures of similarity. A signal reflecting a coded representation of the original signal is generated based on one or more determined trial original signals. The signal reflecting a coded representation of the original signal may be provided by an analysis-by-synthesiscoder, such as a CELP coder.



## EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT  Citation of document with indication, where appropriate, Relevant				EP 93309580.4
Category	Citation of document with it of relevant pa		te claim	APPLICATION (Int. Cl.5)
<,P	EP - A - 0 539 (AMERICAN TELE AND TELEGRAPH * Fig. 3; a	PHONE	1,16	G 10 L 5/06 G 10 L 5/02 G 10 L 7/02
A	EP - A - 0 500 (FUJITSU LTD) * Abstract;		1,16	
A	EP - A - 0 418 (KONINKLIJKE P NEDERLAND N.V. * Abstract;	TT )	1,16	
				TECHNICAL FIELDS SEARCHED (Int. Cl.5)
				G 10 L 5/00 G 10 L 7/00 G 10 L 3/00
	The present search report has b	een drawn up for all claims		
	Place of search	Date of completion of the se	arch arch	Examiner
		29-09-1994	i	BERGER
CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document			T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons  &: member of the same patent family, corresponding document	